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## THE GENERIC, SPECIFIC AND LOWER CATEGORY NAMES OF THE NEARCTIC BUTTERFLIES

PART 3 — Argynnids  
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THE PRESENTATION OF THE NAMES used for the Argynnids will follow the format of the two earlier parts of this work but with some modifications.

Since the data for the generic names associated with these butterflies have already been published (McHenry, 1963) in a list of the world-wide generic names for the group, no further discussion of the genera will be presented.

The Nearctic Argynnids can be rather easily separated into two generic groups based on relative size without doing harm to more sophisticated considerations or disturbing the arrangements that have historically been followed for this group. The smaller species will be considered under the generic name *Boloria* Moore; the larger species will be considered under the generic name *Argynnis* Fabricius.

A common list of 270 specific names for all the Argynnids in an alphabetical arrangement will precede the main body of text; each name in the list will have an indication as to the genus and as to the species number under which it may be found in the main body of text. Misspellings are not given in the list but are included under the appropriate names in the main body of text.

In the text dealing with the *Boloria*, the names of the 14 species of *Boloria* recognized by dos Passos (1964) have been used as a convenience in presenting 95 names for this group although three additional species names, *pales* [Denis & Schiffermüller], *dia* Linnaeus and *euphrosyne* Linnaeus, have been added in order to present references to names which have been historically associated with some Nearctic species.

In the text dealing with the *Argynnis*, the names of the 13 species of *Speyeria* Scudder recognized by dos Passos (1964) have been used as a convenience in presenting the 175 names for this group.

In the body of the text, the *Boloria* and *Argynnis* will be considered separately. The recognized species names for each group will be presented in alphabetical order and in turn the names associated with them by dos Passos (1964) will be given alphabetically under them.

Since the purpose of this paper is to present data for consideration rather than to present conclusions, all generic and specific names are used or arranged here only as a convenience in presenting them and without any implied approval of their use. As a great deal of subjective judgment is required in attempting to determine generic or specific relationships in such a confusing group as this, there will always be differences of opinions among students.

LIST OF SPECIES AND LOWER CATEGORY NAMES USED  
OR AVAILABLE FOR THE ARGYNNIDS

(A = *Argynnis*; B = *Boloria*)

adiante A-8	beani A-2	coronis A-4
adiaste A-8	behrensii A-13	cottlei A-2
alaskensis B-10	bellona B-3	creelmani A-3
alaskensis B-13	benjamini A-11	cunninghami A-11
albequina B-16	bernardensis A-4	cybele A-5
alberta B-1	bischoffi A-11	cynna A-13
albrighti A-8	boisduvalii B-17	cypris A-1
alcestis A-1	boharti A-8	daphnis A-5
apacheana A-12	bremnerii A-13	daphnis A-5
alticola B-7	browni B-9	dawsoni B-7
americana B-15	brucei A-11	denali B-7
ammiralis B-3	butleri B-4	dennisi A-2
andersoni B-8	byblis A-1	dia B-5
aphirape B-7	caelestis B-7	diana A-6
aphrodite A-1	calgariana A-3	distincta B-2
arctica B-4	californica A-4	dodgei A-2
arge A-11	caliginosa A-9	dolli A-10
argenticollis B-8	callippe A-3	dorothea A-2
arizonensis A-2	canadensis A-2	edonis A-7
artonis A-11	carolae A-13	edwardsii A-7
ashtaroth A-10	carpenterii A-5	egleis A-8
astarte B-2	chariclea B-4	egleis A-8
astarte A-8	charlottii A-5	elaine A-3
astarte A-10	chemo A-2	eldorado B-6
astarte A-11	chitone A-2	electa A-2
atlantis A-2	clemencei A-8	epithore B-6
atossa A-8	clio A-11	epithore B-6
atrocatalis B-16	coeruleus A-12	erinna A-11
baal A-5	columbia A-1	eris A-11
bakeri A-1	columbia A-1	ethne A-1
banfensis B-1	comstocki A-3	eunomia B-7
baroni A-3	conchyliatus A-13	euphrosyne B-8
bartschi A-1	conquista A-9	eurynome A-11
baxteri B-16	cornelia A-2	fasciata B-3

- fieldi A-11  
 freija B-9  
 freya B-9  
 frigga B-10  
 gallatini A-3  
 garretti A-13  
 gerhardi A-3  
 gibsoni B-10  
 gloriosa A-13  
 grandis B-17  
 gregsoni A-9  
 greyi A-2  
 gronlandica B-15  
 gunderana B-16  
 gunderi B-9  
 gunderi A-4  
 gunderi A-11  
 halli B-13  
 halycone A-4  
 harmonia A-3  
 harperi B-7  
 helena B-17  
 helena A-2  
 hennei A-4  
 hermosa A-12  
 hesperis A-2  
 hippolyta A-13  
 hollandi A-2  
 hutchinsi A-2  
 hughii A-1  
 hydaspe A-9  
 idalia A-10  
 igeli A-11  
 improba B-11  
 infumata A-10  
 ingens B-17  
 inornata A-3  
 irene A-2  
 jenistai B-3  
 jenningsae B-16  
 jesmondensis A-11  
 juba A-3  
 kleenei B-3  
 krautwurmi A-5  
 kriemhild B-12  
 labradorensis B-17  
 laddi B-7  
 lais B-7  
 lais A-2  
 lapponica B-9  
 laura A-3  
 laurenti B-12  
 laurina A-3  
 lehmanni B-10  
 lethe A-5  
 letis A-5  
 leto A-5  
 letona A-5  
 liliana A-3  
 linda A-8  
 lucki B-12  
 lurana A-2  
 luski A-11  
 macaria A-3  
 macdunnoughi A-8  
 malcombi A-13  
 mammothi A-8  
 manitoba A-1  
 marilandica B-16  
 martini B-17  
 mayae A-1  
 meadii A-3  
 minor A-9  
 montana A-7  
 monticola A-13  
 montinus B-17  
 montivaga A-8  
 montivaga A-11  
 mormonia A-11  
 morrisii B-8  
 myrina B-3  
 myrina B-16  
 myrissa B-16  
 myrtleae A-13  
 nabokovi B-9  
 napaea B-13  
 natazhati B-9  
 nausicaa A-2  
 nearctica B-13  
 nebraskensis B-16  
 nenoquis B-5  
 nevadensis A-3  
 nichollae B-7  
 nigrocaerulea A-12  
 nikias A-2  
 nitocris A-12  
 nivea B-16  
 nokomis A-12  
 novascotia A-5  
 nubes B-16  
 obscurata B-4  
 obscuripennis B-6  
 oenone B-4  
 opis A-11  
 ossianus B-7  
 oweni A-8  
 pales B-14  
 pallida A-10  
 pardopsis B-3  
 pfoutsi A-13  
 picta A-13  
 platina A-13  
 polaris B-15  
 princeps B-8  
 pseudocarpenteri A-5  
 pugetensis A-5  
 purpurascens A-9  
 rainieri B-17  
 rainierensis A-11  
 reiffi B-13  
 rhodope A-9  
 rubyensis A-11  
 rufescens A-12  
 rupestris A-3  
 saga B-10  
 sagata B-10  
 sakuntala A-9  
 schellbachi A-2  
 secreta A-8  
 selene B-16  
 semiramis A-4  
 semivirida A-3  
 serratimarginata B-16  
 shastaensis A-13  
 sierra A-3  
 simaetha A-4  
 sineargentatus A-13  
 sinope A-13  
 skinneri A-9  
 snyderi A-4  
 sordida A-13  
 suffusa A-1  
 tarquinius B-9  
 tehachapina A-8  
 tejonica A-8  
 terraenovae B-16  
 tetonia A-2  
 titania B-17  
 toddi B-3  
 tollandensis B-16  
 tomyris B-7  
 triclarius B-7  
 utahensis A-8  
 valesinoidesabla A-5  
 valesinoidesalba A-12  
 victoria B-2  
 viola A-2  
 viridicornis A-9  
 wasatchia A-2  
 washingtonia A-11  
 wawonae B-6  
 wenona A-12  
 whitehousei A-1  
 winni A-1  
 wrighti A-3  
 youngi B-11  
 zerene A-13

LIST OF SPECIES AND LOWER CATEGORY NAMES  
USED OR AVAILABLE FOR BOLORIA

1. BOLORIA ALBERTA (W. H. EDWARDS).  
alberta, Argynnis W. H. Edwards. 4 June 1890. Canadian Ent. 22(6): 113-114. "From one ♂ and two ♀ sent me by Mr. Thomas E. Bean, and taken at Laggan, Alberta. He writes: "This Argynnis, I think, occurs strictly above timber line, and not very near it either, though also not at the highest points in the mountains." No date data given.  
banffensis, Brenthis alberta Gunder. 28 Mar. 1932. Pan-Pacific Ent. 8(3): 125. "Holotype ♂;... Banff, Alberta, Canada, July 21, 1930. Type in author's collection."
2. BOLORIA ASTARTE (DOUBLEDAY).  
astarte, Melitaea Doubleday. [4 Oct. 1847]<sup>1</sup>. In Doubleday and Hewitson. Genera Diur. Lepid. 1 (12): plate 23, fig. 5 (named on plate). Text published later: 1 (21) on page 181 where in a note he gives the name as Argynnis astarte. No sex, date, series nor locality data given.  
distincta, Brenthis Gibson. 10 Jan. 1920. Rept. Canadian Arct. Exped. 3(i): 25i, 54i; pl. 4, fig. 12. "Type, a female, from Harrington creek, Yukon Territory, lat. 65° 05' July 30, 1912... Two paratypes, one male and one female, the former from Eduni mountains, 6,000 feet, Gravel River, Northwest Territories, July 8, 1908,... and the latter from Tindir creek, Yukon Territory, lat. 65° 20' international boundry, July 25, 1912..."  
victoria, Argynnis W. H. Edwards. 21 Sept. 1891. Canadian Ent. 23 (9): 198-199. "Described from a single male taken with others of both sexes by Mr. Thos. E. Bean, at Laggan, Alberta [Canada]". "The female I have not seen, but Mr. Bean tells me that it is essentially like the male". Edwards quotes Bean: "It is strictly alpine... The last week in July seems to be the time of flight."
3. BOLORIA BELLONA (FABRICIUS).  
ammiralis, Argynnis Hemming. Dec. 1933 [before 19th]<sup>2</sup>. The Entomologist 66(847): 276, no. 7. A new name for P[apilio]. N. P. bellona Fabricius, 1775 [17 Apr.]<sup>3</sup> which he considered as a homonym of Pap. Helicon, bellona Cramer, [1776]<sup>3</sup>. Uitland. Kapellen Voorkom. Drei Waereld-Deelen Asia, Africa en America 1(2): 20, fig. E-F; pl. 13, figs. E-F; 1(8): 152.  
bellona, P[apilio]. N[ymphalis]. P[haleratus]. Fabricius. 1775 [17 Apr.]<sup>3</sup>. Systema Entomologicae; pp. 517-518, no. 317. "Habitat in America". No sex, series nor date data given. In applying Opinion 516 issued 16 May 1958 by the International Commission, the name Papilio bellona Fabricius would have precedence over the name Papilio bellona Cramer which is a different butterfly.  
fasciata, Argynnis bellona Cockerell. Apr. 1889. The Entomologist 22(311): 99. Cites a brief description of an unnamed specimen in Maynard (Butt, N. England; pp. 27-28 (in part), under no. 31; [Feb. 1886]<sup>4</sup>). Maynard's specimen was taken "in Massachusetts". No sex nor date data was given by Maynard.  
jenistae, Boloria toddi Stallings and Turner. 15 Jan. 1947. Canadian Ent. 78(7-8): 135-136. "Holotype: Male... Lloydminster, Sask-

[atchewan], [Canada] 5/27/41... Allotype: Female... Lloydminster, Sask. 5/8/41... Paratypes: 68 males and 5 females collected at Lloydminster and Haidan, Sask., during May, June and July, 1941 to 1945... Holotype and allotype will be placed in the National Museum at Washington, D. C. "

kleeni, Brenthis bellona Watson. Sept. - Dec. 1921. Jour. New York Ent. Soc. 28(3-4): 171-172. "This beautiful aberration was captured... at West Harford, Connecticut, May 3, 1921. Holotype female, in the collection of The American Museum of Natural History..."

myrina, Papilio Nymph[alis], Phalerat[us]. Martyn, 1797. Psyche, Figs. Nondescr. Lepid. Ins. (?): 5, 5; plate [1]: figs. [2]-[3].  $\sigma$  ? described. "Our original from New Georgia". No series nor date data given. Misidentifies Pap. Nymph. Phaler. myrina Cramer [1777]<sup>3</sup>.

pardopsis, B[renthis], bellona Holland. 10 Oct. 1928. Ann. Carnegie Mus. 19(1) art. 3: 45, no. 11b. 1  $\phi$  described. "... taken at Crafton, Allegheny County, P[ennsylvania]..." No date given.  
toddi, B[renthis], bellona Holland. 10 Oct. 1928. Ann. Carnegie Mus. 19(1) art. 3: 44-45, no. 11a. "Type  $\sigma$ , St. Margarets River, July 5, 1917, C[arnegie]. M[useum]. Acc. No. 5858, Todd Coll.; allotype  $\phi$ , East Main, July 8, 1914, C. M. Acc. No. 5269, Todd. coll.; four male paratypes from St. Margarets and Moisie Rivers, Quebec". In the first part of the description he says: "From the interior of Labrador we have received a good series of specimens..."

#### 4. BOLORIA CHARICLEA (SCHNEIDER).

arctica, A[rgynnis]. Zetterstedt. [1839, after 31 Mar.]<sup>5</sup>. Insecta Lapponica (5): col. 899, no. 18.  $\phi$  described. "Hab. in Groenlandia, e qua mihi per D. Westermann benevole missam possideo. (Groenlandia.)"<sup>1</sup>. No date nor series data given.

butleri, Argynnis W. H. Edwards. 18 Mar. 1883. Canadian Ent. 15 (2): 32-33. "From 1  $\sigma$  taken at Cape Thompson, North-west America, July 19, 1881, and 1  $\phi$  taken at Kotzebue Sound, July 14th, 1881,..." Spelled butlerii by Edwards; Trans. Amer. Ent. Soc., 11: 273, no. 146, 1884.

chariclea, Papilio Schneider. 1794. Neu. Mag. fur die Liebhaber der Entomologie 1(5): 588-589. [Lappland] (from article title). No sex, series nor date data given. Spelled churcilea by Johansen. 7 Nov. 1921, Rept. Canadian Arct. Exped. 1913-18 3(k): 36k. Spelled carichlea by Zetterstedt; [1839, after 31 Mar.]<sup>5</sup>; Insecta Lapponica (5): 899, under no. 18. Spelled churchilea by dos Passos; 1964, The Lepid. Soc. Memo ir 1: 90, under no. 608a.

obscurata, A[rgynnis], chariclea M'Lachlan. 23 May 1878. Jour. Linnean Soc. (Zoology) 14(74): 109-111. "There is one  $\phi$  of this form 81° 42' N." No date data given.

oenone, Arg[ynnis]. Scudder. Mar. 1875. Proc. Boston Soc. Nat. Hist. 17(3) sig. 19: 297-299. "22 specimens, 12  $\sigma$ , 6  $\phi$ , 4 doubtful, Labrador (A. S. Packard, Jr.), Fort Simpson, Great Slave Lake, British America (W. H. Edwards), Natashquam, Southern Labrador (W. Cooper), Colorado (T. L. Mead)." No dates given. Inadvertently proposes a name for what he described

as Brenthis chariclea (Schneid.) Herr.-Schaeff. "This is the butterfly... also distributed by me in former years under the Ms. name of Arg. Oenone."

5. BOLORIA DIA (LINNAEUS).

dia, P[apilio]. Nymphalis. [Phaleratus] Linnaeus, 1758, Syst. Nat., 10th Ed. 1: 785, no. 207. "Habitat in Austria." No sex, series nor date data given.

nenouquis, Brenthis Reakirt. [11 June 1866]-[13 Feb. 1867]<sup>6</sup>. Proc. Acad. Nat. Sci. Phila. [18] (3): 247, no. 22. ♂ described, "Hab. - California. (Coll. Tryon Reakirt,)" No series nor date data given. Strecker, who later possessed Reakirt's collection said (Lepid., Rhopal. and Heter., Indig. and Exot. Suppl. 3: 22; 1900): "1 ♂" which he considered to be dia Linnaeus.

6. BOLORIA EPITHORE (W. H. EDWARDS).

eldorado, Brenthis epithore Strand. June 1915. Archiv für Naturgeschichte, A 80(11): 156. "6 Ex. von Plumas Co[unty]. [California] 10. - 17. VI., ein von Eldorado Co[unty]. [California] 25. - 28. VI. 13."

epithore, Argynnis W. H. Edwards (Boisduval Ms. name). [9 May 1864]<sup>7</sup>. Proc. Ent. Soc. Philadelphia 2(4): 503-504. "From a male sent me from California...". No date given.

epithore, Argynnis Boisduval. [1869, before 1 Nov.]<sup>8</sup>. Ann. Soc. Ent. Belgique 12: 58, no. 50. ♂ and ♀ described. "M. Lorquin a trouvé cette espèce dans les hautes montagnes de l'est où elle est fort rare et difficile à prendre". No dates given. A homonym of Argynnis epithore W. H. Edwards, [9 May 1864].

obscuripennis, Brenthis epithore Gunder. 7 Jan. 1926. Entomological News 27(1): 7, no. 9; plate I, fig. 9. "Data: Holotype ♀... (Author's Coll.), Chilcolin, British Columbia, Canada, May 30, 1915."

wawonae, Brenthis epithore Gunder. 18 May 1924. Entomological News 35(5): 156; plate 2, fig. F. "Data: Holotype ♂. (Author's Coll.), Wawona, Mariposa County, California; July 6, 1922."

7. BOLORIA EUNOMIA (ESPER).

aphirape, [Papilio] Hübner. [24 Dec. 1799]-[13 Apr. 1800]<sup>9</sup>. Samm. Europäischer Schmett. (Papiliones): plate 5, figs. 23-25; page 8 only, no. 1 (published later). ♂ and ♀ described. No date, series data nor locality given. Hübner considered Pap. eunomia Esper as a synonym.

alticola, [Brenthis] aphirape Barnes and McDunnough. 15 Apr. 1913. Contrib. Nat. Hist. Lepid. N. Amer. 2(3): 97-98. "... and have made types and cotypes of 5 ♂'s and 2 ♀'s from Hall Valley, Colo [rado]., (June 21-30) (Barnes) contained in Coll. Barnes." A homonym of Argynnis angarensis alticola Sushkin and Tsetverikov, 20 Apr. (3 May) 1907, Horae Soc. Ent. Rossicae 38(1-2): 18.

caelestis, Argynnis apherape Hemming. Dec. 1933 [before 19th]<sup>2</sup>. The Entomologist 66(847): 275, no. 5. A new name for Brenthis apherape alticola Barnes and McDunnough, 15 Apr. 1913, which is a homonym of Argynnis angarensis alticola Sushkin and Tsetverikov, 20 Apr. (3 May) 1907.

dawsoni, Brenthis apherape Barnes and McDunnough. 12 July 1916. Canadian Ent. 48(7): 222-223. "Types - A long series of ♂'s and ♀'s from Hymers, Ont[ario]. [Canada] (June 15-30) in Coll. Barnes."

- denali, Brenthis (Clossiana) aphirape Klots, 17 Dec. 1940. Jour. New York Ent. Soc. 48(4): 413-414. "Types: Holotype ♂, July 25, 1931, and allotype ♀, July, 1931, McKinley National Park"[Alaska]. Several paratypes with July dates taken in various years are reported from the same locality as the primary types as well as from Cantwell (S. of Fairbanks) and from Alfred Creek Camp also in Alaska. "The holotype, the allotype and most of the paratypes are in the American Museum of Natural History. Paratypes are in the collections of Cyril dos Passos and the author."
- eunomia, Papilio. Nymphalis. Phal[eratus]. Esper. [1799]<sup>10</sup>. Die Schmetterlinge. Suppl. Theils 1 (?): 94, no. 212; pl. 110, no. 5. ♂ described. No series nor locality data given. I have fixed the date on the appearance of the text; the date of the plate's appearance is unknown; the name on the plate is N. Phaler. Eunomia.
- harperi, Brenthis aphirape dawsoni Gunder, 30 June 1934, Canadian Ent. 66(6): 127. "Holotype - ♂, ... Churchill, Man[itoba]., Canada, July 11, 1933. Type to be deposited in the Calif. Academy of Sciences. . ."
- laddi, Clossiana aphirape Klots, 22 Mar. 1940, American Mus. Nov. No. 1054: 4. "Type Series. - All specimens of type series from Snowy Range, Albany Co.[unty]., Wyo[ming]. Holotype ♂, 9 ♂ and 3 ♀ paratypes, July 7, 1939, collected by Ladd and Klots in willow bog, Hudsonian Zone, alts. 10,400 to 10,800 ft. Allotype ♀, 1 ♂ and 1 ♀ paratype, August 13, 1935, collected by Klots, in willow bog, near Class (Lewis) Lake, Hudsonian Zone, alt. 10,900 ft. 1 ♂ paratype (with wings incompletely expanded) July 17-23, 1935, collected by Klots, in willow bog near Class (Lewis) Lake, Hudsonian Zone, alt. 10,900 ft. Holotype, allotype, 3 ♂ and 1 ♀ paratype in The American Museum of Natural History. The remainder of the paratypes are in the author's collection. Some will be distributed to museums."
- lais, Argynnis. Scudder, Mar. 1875, Proc. Boston Soc. Nat. Hist. 17(3) sign. 19: 294-296. "2 ♂, 2♀, Caribou Island, Straits of Belle Isle, Labrador, (A. S. Packard, Jr., S. P. Butler). Specimens have also been taken at Mackenzie River (W. H. Edwards) and in Colorado (T. L. Mead)." No date data given. Inadvertently proposes a name for what he describes as Brenthis aphirape Hübner.
- nichollae, Brenthis aphirape Barnes and Benjamin, 8 Dec. 1926. Bull. Sou. Calif. Acad. Sci. 25(3): 92, no. 188d. "Type locality: Rocky Mts. Number and sexes of types: Holotype ♂, Allotype ♀, 2 ♂ 1 ♀ Paratypes; Mrs. B. Nicholl, ex Coll. Oberthür." No date data given.
- ossianus, Argynnis Boisduval, 1832. Icon. Hist. Lepid. Nouv. Peu Connu 1(?): 94-95, no. 1; plate 19, figs. 1-3. ♂ and ♀ described. "Elle se trouve dans le nord de la Laponie, au Cap-Nord et au Labrador." No series nor date data given. Boisduval misapplied this name of Herbst to a description and figures of tricularis Hübner (as per dos Passos, 1964, The Lepidopterists Society, Memoir No. 1, p. 9, under 610a).
- tomyris, Papilio Herbst, 1800. Natur. Bekan. Ausland. Insekten. Die Schmetter. 10: 102-104; plate 270, figs. 6-7. "in Preussen. . ." No sex, series nor date data given.

trichlaris, Argynnis Hübner. [Mid May 1821] - [31 Dec. 1821]<sup>11</sup>. Samm.

Exot. Schmetter. 2(?): no text; plate [19], figs. 1-4; p. [1] in Index, published later by Geyer. No sex, series nor date data given. Spelled trichlaris by Morris, Feb. 1862, Smithsonian Misc. Coll., p. 48, under no. 12.

8. BOLORIA EUPHROSYNE (LINNAEUS).

andersoni, Brenthis Dyar. Mar. 1904. Jour. New York Ent. Soc. 12 (1): 39. "One male, labelled, Kootenay, B[ritish]. C[olumbia]., from E. M. Anderson, who originally had three. Type. - No. 7735, U. S. National Museum". No date given.

argenticollis, P[apilio]. Retzius. 1783. De Geer... Genera and Species Insect.; p. 31, no. 13. Gives De Geer's name for euphrosyne Linnaeus, thus creating a synonym.

euphrosyne, P[apilio]. N[ymphalis]. [Phaleratus] Linnaeus. 1758. Syst. Nat. 10th, Ed. 1: p. 481, no. 142. "Habitat in Europa and America septentrionali". No sex, series nor date data given. Spelled euphrosyne by Linnaeus, 1767, Syst. Nat., 12th Ed. 1(2): [1339].

morrisii, Brenthis Reakirt. [11 June 1866] - [13 Feb. 1867]<sup>6</sup>. Proc. Acad. Nat. Sci. Phila. [18] (3): 246-247, no. 21. ♂ and ♀ described. "Hab. - California. (Coll. Tryon Reakirt.)" No series nor date data given. Strecker, who later possessed Reakirt's collection, says (Lepid., Rhopal. and Heter., Indig. and Exot. Suppl. 3: 20, 1900): "1 ♂" which he considered to be euphrosyne Linnaeus.

princeps, P[apilio]. N[ymphalis]. [Phaleratus]. Linnaeus. 1758. Syst. Nat. 10th, Ed. 1: 481, under no. 142. Inadvertently created a synonym of euphrosyne; see that name for details.

9. BOLORIA FREIJA (THUNBERG).

browni, Clossiana freiija Higgins. Sept. 1953. The Entomologist 86(9): 210, no. 9. "Holotype male. - Independence Pass, Pitkin Co [untly]., 30th June, 1950. Allotype female. - Hall Valley, Park Co. Colo[rado]. 23rd June, 1950. Paratypes. - 10 males and 9 females in my collection". "The holotype and female allotype have been handed to Mr. Cyril dos Passos for inclusion in the collection of the Natural History Museum, New York."

freiija, Papilio N[ymphalis]. [Phaleratus]. Thunberg 10 Dec. 1791. D. D. Disser. Ent. Sist. Insecta Svec. (2): 34-36; plate 2, figs. 14 and 14. [♂ and ♀ described]. "Habitat in Vestrobothnia juxta flumina locis graminosis D. Mag. Libijebblad and in Lapponia D. Mag. Quenzel". No series nor date data given.

freya, Argynnis Godart. 1819. In Godart and Latreille in Latreille. Encycl. Méth. 9(1): 254, no. 37 (named in French); 9(1): 273, no. 37. Proposes new name for freiija Thunberg. Cites Thunberg's description among others. "Elle habite le nord de la Suède and le sud de la Laponie."

gunderi, Brenthis freiija Harper. 8 Sept. 1933. Pan-Pacific Ent. 9 (3): 99. "Holotype male, McCreary, Manitoba, Canada. May 22nd, 1932". "... type deposited in the Calif. Academy of Sciences at San Francisco, Calif. as an "indefinite loan" for safe keeping."

lapponica, P[apilio]. Nymph[alis]. [Phal[eratus]]. dia Esper. [1793]<sup>10</sup>. Die Schmetterlinge. Suppl. Theils 1(pp. 9-60, plates 95-100): 21-22, no. 187; plate 97, fig. 3 ♂ described. "Der lappandisch P. Dia." No series nor date data given.



nabokovi, Boloria freija Stallings and Turner, 15 Jan, 1947, Canadian Ent. 78(7-8): 134-135; fig. 1. "Holotype: Male, Alaska Military Highway, July 23, 1943, Mile 102, North of Summit 2, Ravine, Elevation 6000 ft. . . Paratype: One male. Same data". "Holotype and paratype returned to the Museum of Comparative Zoology at Cambridge, Mass., from which we received the specimen on loan". "This. . . race. . . was collected along the Alaska-Military Highway in British Columbia."

natazhati, Brenthis Gibson, 10 Jan, 1920, Rept. Canadian Arct. Exped. 3(i): 21i-22i, 52i, 56i; plate 3, figs. 6 and 12; pl. 5, fig. 6. "Type, a male, in the Canadian National collection bearing the label "141st meridian, north of mount Natazhat, international boundary survey, elevation 8,600 feet, June 15, 1913. . . Paratypes, three males and two females from the same locality and bearing the same label". "Two specimens taken during the Canadian Arctic Expedition, namely at Bernard harbour, Northwest Territories, July 14, 1916, male and female. . . although somewhat rubbed are apparently this new species."

tarquinius, Melitaea Curtis, 1835, In J. Ross, Append. Narr. 2nd, Voy. Search North-West Pass. (Nat. Hist. Sect.); pp. lxxviii-lxix, no. 14. ". . . specimens were captured on the 10th of June, and between the 2d and 14th of July, 1830, they were abundant; in 1831 the first butterfly seen was of this species; this was the 10th of July, and on the 14th two more were taken". No sex, series nor locale data given.

10. BOLORIA FRIGGA (THUNBERG).

alaskensis, A[rgynnis], frigga improba Lehmann, [16 Sept. 1913]<sup>12</sup>.

In. A. Seitz, Grosser-Schmett, Erde 5(173): 424, Figured later on plate 87, col. c. ". . . ♀ received by Prof. Seitz from north-eastern Alaska (69° 40' N. Lat., 141° W. Long.)". No date given. A homonym of B. pales alaskensis Holland, Mar. 1900.

frigga, Papilio N[ymphalis], Ph[aleratus], Thunberg, 10 Dec. 1791 D. D. Dissert. Ent. Sist. Insecta Svec. (2): 33-34. "Habitat in Lapponiae sylvis, locis uliginosis Salice Lapponum repletis, Lilijeblad; Quenzel". No sex, series nor date data given.

gibsoni, Brenthis frigga Barnes and Benjamin, 8 Dec. 1926, Bull. Sou. Calif. Acad. Sci. 25(3): 92, no. 197d. "We select as Holotype ♂ a specimen from Barter Island, Northern Alaska, July 4, 1914, ex Coll. D. Jenness, and as Allotype ♀ the specimen figured by Gibson, the remainder of Gibson's series are designated paratypes." Applies the name to the specimens Gibson (Rept. Canadian Arct. Exped. 1913-18 3(i): 24i; plate 5, fig. 1) called "Brenthis frigga alaskensis Lehm." Gibson's series consisted of 3 ♂♂ and 4 ♀♀ from Alaskan locales (July dates in 1914) and 3 ♂♂ and 3 ♀♀ from Armstrong Point, Victoria Island, Northwest Territories, June 20 to July 11, 1916.

lehmanni, B[renthis], frigga Holland, 10 Oct. 1928, Ann Carnegie Mus. 19(1) art. 3: 44. A new name for alaskensis Lehmann in Seitz which is a homonym of alaskensis Holland. See alaskensis Lehmann for data.

saga, Argynnis frigga Staudinger (Kaden Ms. name). Oct. -Dec. 1861, Ent. Zeitung Stettin 22(10-12): 350-351, under no. 16. ". . . aus

Labrador". "in der...Sammlung des Herr Direktor Kaden..."

No sex, series nor date data given.

sagata, Brenthis frigga Barnes and Benjamin. 25 June 1923. Canadian Ent. 55(6): 146. "A series of specimens from Alberta can remain as intermediates between saga and sagata. Type localities and number and sexes of types: Holotype, ♂, June 24, 1893; allotype, ♀, June 23, 1893; 8 ♂, 5 ♀ paratypes, June 23-24, 1893; all Hall Valley, Colorado, Wm. Barnes: 4 ♂ paratypes, "Colo." (Bruce); 1 ♀ paratype "Colorado". "

11. BOLORIA IMPROBA (BUTLER).

improba, Argynnis Butler. Feb. 1877. Ent. Monthly Mag. 13(153): 206. "The first examples of this species... were presented to the British Museum in 1851 by Sir John Richardson, captured between 67 1/2 and 68°; they were worn,... In 1855 a nearly perfect female example, of which I here give a description, was presented by Captain Collinson, of H. M. S. "Enterprise," and forms part of a collection of 100 Lepidoptera made in Winter Cove and Cambridge Bay." No date data given.

youngi, B[renthis]. Holland. Mar. 1900. Entomological News 11(3): 383-384, no. 9. "1 ♀, mountains between Forty-Mile and Mission Creeks, N. E. Alaska, June 20."

12. BOLORIA KRIEMELD (STRECKER).

kriemhild, Argynnis Strecker. [1878, after 9 Aug.] - [July 1879]<sup>13</sup>. In Ruffner. Ann. Rept. Sec. War for 1878 2(3), append. SS: 1854; plate 1, figs. 5-6. "...this is the species which I have cited in my catalogue on p. 117 as Bellona var., there described from a single example received from Utah. The reception of other examples since from Arizona as well as the present ones from Rio Florida Colorado..." No sex nor date data given.

laurenti, Argynnis Skinner. 4 Dec. 1913. Entomological News 24(10): 430. "Described from eight specimens taken... at Silver Lake (Brightons), Utah, July 10th to 14th, 1889. Type in the collection of the Academy of Natural Sciences of Philadelphia." No sex data given.

lucki, Clossiana (emendatio) Reuss. 1 Apr. 1923. Societas Entomologica 38(4): 14 ♂ and ♀ described. "...aus Utah, Nord-Amerika". No date data. "1 ♂, 2 ♀♀ in coll. m." Original spelling: lücki.

13. BOLORIA NAPAEA (HOFFMANSEGG).

alaskensis, B[renthis]. pales Holland. Mar. 1900. Entomological News 9(3): 383, no. 6. "1 ♂, mountains between Forty-Mile and Mission Creeks, July 20..."

halli, Boloria pales Klots. 22 Mar. 1940. American Mus. Nov. No. 1054: 1-4. "Type Lot. - Holotype male, allotype female, 139 male paratypes and 57 female paratypes, vicinity of Green River Pass, Wind River Range, Sublette Co[unty]., Wyoming, July 18-31, 1939, collected by David Bigelow and the author. The holotype, allotype and a series of paratypes have been deposited in the collection of The American Museum of Natural History. The remaining paratypes are in the collections of Mr. Bigelow and the author. Series of them will be distributed to numerous museums." "

napaea, [Papilio]. Hoffmannsegg. 1804. In Illiger. Mag. fur Insektenkunde 3: 196. Proposes a new name for [Papilio] isis Hübner

(Sammlung Europäischer Schmett. [Papiliones]: plate 7, figs. 38-39 and plate 110, figs. 563-564; [24 Dec. 1799] - [13 Apr. 1800]<sup>9</sup>) which is an homonym of Papilio D. F. isis Thunberg, 10 Dec. 1791, D.D. Dissert. Ent. Sist. Insecta Svec. (2): 31. Hübner illustrated both the ♂ and ♀. Hübner in his text (published after the plate) says: "Heim. Die Alpen des Tyrols." Hübner gave no series nor date data.

nearctica, Boloria pales arsilache Verity, 12 Oct. 1932. Deutsche Ent. Zeitschrift "Iris" 46(3): 104 and 108. Applies the name to the "pales Schiff," described by Lehmann in Seitz, Die Gross-Schmetter. Erde 5: 423, [16 Sept. 1913] where the ♂ and ♀ are described but no series nor date data is given. "...north-eastern Alaska (69° 40' N. Lat. and 141 W. Long.)"

reiffi, Boloria Reuss, 22 Dec. 1925. Internat. Ent. Zeitschr. 19 (36): cols. 279-280. "Nur ein exemplar aus Britisch-Columbien, die Type ♂, in Koll. m." No date given.

14. BOLORIA PALES ([DENIS AND SCHIFFERMULLER]).  
pales, P[apilio]. [Denis and Schiffermuller]. 1775 [8 Dec.]<sup>3</sup>. Ankünd. Syst. Werkes Schmetter. Wienergegend; pp. 176-177, no. 8. Locale: [Wienergegend] (from title of work). No sex, series nor date data given.

15. BOLORIA POLARIS (BOISDUVAL).

americana, Argynnis polaris Strand, 1905. Rept. 2nd. Norwegian Arctic Exped. "Fram" 1898-1902 1(3): 10-11, no. 3. "Es liegen 8 Exemplare vor, die folgender Orte gesammelt wurden: Havnen, Rice Strait (Ellesmere Ld.) 29/6 99; *ibid.* 25/7 99; Havnefjorden (Jones Sd.) 22/7 1900; Gaasefjorden (Ellesmere Ld) 30/6 02; die Westseite von Gaasefjorden 6/7 1902 (Baumann). No sex data given.

gronlandica, Argynnis chariclea [Skinner]. 1 Mar. 1892. Entomological News 3(3): 49, nos. 9-10; plate 2, figs. 9-10. Locale: [Greenland]. (from plate explanation text). In a later reference by Skinner and Mengel (Proc. Acad. Nat. Sci. Phila. 44: 157, 1892) indicate the West Coast of Greenland at possibly any or all of the following: McCormick Bay, Herbert Island and Disco. No sex nor date data given. The later reference says: "...a few specimens..."

polaris, Argynnis Boisduval. [22 Nov. 1828]<sup>14</sup>. Europ. Lepid. Ind. Meth.; pp. 15-16. "...Cap Nord..." No sex, series nor date data given.

16. BOLORIA SELENE ([DENIS AND SCHIFFERMÜLLER]).

albequina, B[renthis]. Holland, 10 Oct. 1928. Ann. Carnegie Mus. 19(1) art. 3: 40-41, no. 6. "...based upon eight specimens, seven males and one female, collected at White Horse Pass, Yukon Territory, .. Type ♂, ♀ allotype, and 6 ♂ paratypes in Holland Collection". The only female was considered aberrant and was named baxteri.

atrocostalis, Argynnis Huard. Dec. 1927. Le Naturaliste Canadian 54(6): 131, no. 8. ♂ and ♀ described. "Le couple capturé à Chicoutimi, [Canada] en 1881." No date data given.

baxteri, B[renthis]. albequina Holland, 10 Oct. 1928. Ann. Carnegie Mus. 19(1) art. 3: 40-41, no. 6 (in part). See albequina Holland for data.

- gunderana, B[renthis]. selene myrina Forbes, Sept. 1960. Lepid. New York and Neighboring States (4): 150, under no. 1. Forbes attributes the name to Dyar but no publication by Dyar has been located. No series, sex, date nor locale data is given.
- jenningsae, B[renthis]. myrina Holland, 10 Oct. 1928. Ann. Carnegie Mus. 19(1) art. 3: 36, a under no. 1. ♂ described, "... taken... at Jellicoe, on Thunder Bay, Ontario [Canada]. The specimen is in the Carnegie Museum, Acc. No. 5921. "No date data given.
- marilandica, Brenthis selene Clark, 15 Sept. 1941. Jour. Washington Acad. Sci. 31(9): 384. "Type. - From the boggy pasture on the south side of the road from the Beltsville, M[arylan]d., railway station to the Department of Agriculture experiment farm, collected... on July 6, 1929 (U. S. N. M. no. 55470...). "In a previous article (Bull. U. S. Nat. Mus. No. 157: 104; plate 3, figs. 5-6; 1932), he speaks of a series of 16 specimens from Beltsville but gives no sex here or later for the type.
- myrina, Pap[ilio]. Nymph[alis]. Phaler[atus]. Cramer. [1777]<sup>3</sup>. Uitland, Kapellen Voorkom. Drei Waereld-Deelen Asia, Africa en America 2(16): 141 and 150; plate 189, figs. B-C. "On l'a prise dans l'Amérique Septentrionale, à la Nouvelle-York." No series, date nor sex data given. Spelled myrinna by Gruber; Jenaische Zeitschrift 17: 479; plate 8, figs. 34-35; 11 June 1884. Spelled myrinus Herbst; Natursyst. Ins. Schmett. 9: 178-179; plate 255, figs. 3-4; 1798 (as per Scudder).
- myrissa, Argynnis Godart, [1824]<sup>15</sup>. In Godart and Latreille in Latreille. Encycl. Méth. 9(2): 806 (and 253, 268). Proposes new name for myrina (Fabr., Cramer, Herbst).
- nebraskensis, B[renthis]. myrina Holland, 10 Oct. 1928. Ann. Carnegie Mus. 19(1) art. 3: 36-37, no. 1c. "For many years I have had in my possession four specimens, unfortunately all of them males, collected for me in Dodge County, Nebraska..." No date data given. Spelled nebrascensis by Forbes; Sept. 1960; Lepid. New York and Neighbor. States (4): 150, under no. 1.
- nivea, Brenthis myrina Gunder. 30 July 1928. Canadian Ent. 60(7): 163; plate a, fig. 4. "Data: Holotype ♂ (fig. 4)... Staten Island, N[ew]. Y[ork]... May 28, 1900. In Author's coll."
- nubes, B[renthis]. m[yrina]. Scudder. 1 Mar. 1889. Butt. East. U.S. and Canada 1(5): 595-596. "In the Museum of Comparative Zoology is a male from Sanborton, N[ew]. H[ampshire]... collected by W. Blaney on August 15, 1884..." He speaks of two other specimens with suffused black markings but these have no standing.
- selene, P[apilio]. [Denis and Schiffermüller]. 1775 [8 Dec.]<sup>3</sup>. An-künd. Syst. Werkes Schmetter. Wienergegend; p. 321, no. 11. Also see pages 176-177. Locale: [Wienergegend] (from title of work). No sex, series nor date data given.
- serratimarginata, Brenthis myrina Gunder. 7 Jan. 1926. Entomological News 37(1): 7, no. 10; plate 1, fig. 10. "Data: Holotype ♂... (Author's Coll.), Vernon, British Columbia, Canada. August 12, 1904."
- terraenovae, B[renthis]. myrina (emendatio) Holland, 10 Oct. 1928. Ann. Carnegie Mus. 19(1) art. 3: 36, no. 1b. "In the collec-

tion of Theodore L. Mead is a series of male specimens taken by him in Newfoundland". No date data given. Name originally spelled: terrae-novae.

tollandensis, Brenthis myrina Barnes and Benjamin, 5 Feb. 1925. Entomological News 36(2): 44. "Type locality: Tolland, Moffat County, Colorado, altitude approximately 10,000 ft. Number and sexes of types: Holotype ♂; Allotype ♀; 5 ♂, 7 ♀ Paratypes; ... July, 1924. Types in: Barnes Collection."

17. BOLORIA TITANIA (ESPER).

boisduvalii, Argynnis Duponchel (Sommer Ms. name). [1832]<sup>16</sup>. In Godart, Hist. Nat. Lepid. ou Pap. de France, Suppl. to vols. 1-2(?): 127-128; plate 20, no. 4. "Elle habite les contrées les septentrionales de l'Europe". No sex, series nor dates given. Spelled boisduvali by Barnes and McDunnough, Feb. 1917, Check List Lepid. Boreal America; p. 8, no. 193a.

grandis, Brenthis chariclea Barnes and McDunnough, 12 July 1916. Canadian Ent. 48(7): 223. "Types - A long series of ♂'s and ♀'s from Hymers, Ont[ario]. [, Canada] (Aug. 1-15, Dawson) in Coll. Barnes."

helena, Argynnis W. H. Edwards, Feb. 1871. Trans. American Ent. Soc. 3(3-4) sign. 34: 268 only. ♂ and ♀ described. "Taken by Mr. Mead in Colorado." No sex, series nor date data given.

ingens, Brenthis helena Barnes and McDunnough, 15 May 1918. Contrib. Nat. Hist. Lepid. N. Amer. 4(2): 71 and 180; pl. 11, figs. 5-6. "Our type series consists of 4 ♂'s and 6 ♀'s, two of the latter from Sheridan, Idaho; three of the paratypes are in the Collection of Prof. E. T. Owen. . ." The description is opened with the following: "In the Yellowstone Park there occurs a race of helena. . ." No date data given.

labradorensis, Brenthis chariclea oenone Gunder. 30 July 1928. Canadian Ent. 60(7): 163; pl. A, figs. 5 and 5a. "... Holotype ♂... Labrador, no date. In the Barnes coll., Decatur, Ill. . ."

martini, Brenthis helena ingens Gunder. 30 June 1934. Canadian Ent. 66(6): 127-128. "Holotype ♂... Teton trail, Teton Mts., Teton County, Wyoming (just south of the ingens type locality), July 8, 1931. Type in Author's coll."

montinus, Argynnis Scudder, Apr. 1863. Proc. Essex Inst. 3(?): 166, no. 32. ♂ and ♀ described. "This species is found on the lower half of barren summits of the White Mountains, N[ew] H[ampshire]. I have taken only a few specimens from July 21st to Aug. 18th around bushes and in the road." Spelled montina by Klots, 1951, Field Guide to the Butterflies, pp. 91, 112, and 345.

rainieri, B[renthis]. chariclea Barnes and McDunnough, 15 Apr. 1913. Contrib. Nat. Hist. Lepid. N. Amer. 2(3): 96-97 and 148; plate 2, figs. 1-4. "Habitat. Mt. Ra[i]nier, Wash[ington]. (July 23-31) (McDunnough), 7 ♂, 7 ♀. Types, Coll. Barnes." Spelled ranieri by the authors on page 148.

titania, P[apilio]. N[ymphalis]. Ph[aleratus]. Esper. [1793]<sup>10</sup>. Die Schmetterlinge. Suppl. Theils 1(?): 58-59, no. 197; pl. 103, fig. 4. ♀ described. "... aus Sardinien. . ." No date given.

LIST OF SPECIES AND LOWER CATEGORY NAMES  
USED OR AVAILABLE FOR ARGYNNIS

1. ARGYNNIS APHRODITE (FABRICIUS).
- alcestis, Argynnis W.H. Edwards, Dec. 1876. Trans. American Ent. Soc. 5(?) sign. 37: 289-291. ♂ and ♀ described. "... found in Northern Illinois, Iowa and Colorado". No date nor series data given. Type locality "fixed" (dos Passos and Grey, p. 8, 1947) as Galena, Jo Daviess County, Illinois.
- aphrodite, P[apilio], N[ymphalis], P[haleratus], Fabricius, 1787 [after 3 Feb.]<sup>17</sup>. Mant. Ins. 2: 62, no. 590. "Habitat in America meridionali. . ." No date, sex nor series data given. Type locality "fixed" (dos Passos and Grey, p. 6, 1947) as New York City, New York County, New York. Spelled aphrodita by Fabricius; Index Alphabeticus. . . Ent. Syst.; p. 119, no. 443; 1796.
- bakeri, Argynnis aphrodite Clark, 1932 [13 Feb.]<sup>18</sup>. Bull. United States Nat. Mus. No. 157: 276; plate 19, figs. 1-2. "Waynesburg, Ohio, July 2, 1937." No sex nor series data given.
- bartschi, Argynnis cybele Reiff. Dec. 1910. Psyche, Jour. Ent. 17 (6): 252-255; text fig. 1; plate 13, 2 unnumbered figs. "... captured in West Roxbury, Mass[achusetts], during the first week of July, 1907". "Type 1 ♂ in the collection of the Bussey Institution."
- byblis, Dryas aphrodite Barnes and Benjamin, 8 Dec. 1926. Bull. Sou. California Acad. Sci. 25(3): 91, no 157d. "Type locality: White Mts., Ariz[ona]. Number and sexes of types: Holotype ♂, Allotype ♀, 4 ♂ 1 ♀ Paratypes, no dates."
- columbia, Argynnis Henry Edwards, 17 Dec. 1877 - [Nov. 1878]<sup>19</sup>. Pac. Coast Lepid. No. 26: [1]. "... the above description being made from four ♂♂ taken by Mr. Crotch, at Lahache, near the Alaskan border of British Columbia." No date data given. The authorship here is in question, see claim of W. H. Edwards, below.
- columbia, Argynnis W.H. Edwards (H. Edwards Ms. name). Dec. 1877 [Feb. 1878]<sup>20</sup>. Field and Forest 3(6): 102-103. "From a large number of examples taken by the late G. R. Crotch at Lakes Lahache and Ouesnelle, British Columbia, of which 10 ♂ and 4 ♀ are now before me." No date data given. The authorship here is in question, see claim of H. Edwards, above.
- cypris, Argynnis W.H. Edwards, 21 Apr. 1886. Canadian Ent. 18(4): 62-64. ♂ and ♀ described. "Found from Arizona to Montana. Taken in Colorado in 1871 by Mr. Mead; by Mr. Morrison, in his trips to So. Colorado and to Arizona; by Mr. Nash and Mr. Bruce in Colorado. It seems to be an abundant species in the latter state." No series data given. "In 1884, I received eggs... and the females that laid them. From these I bred the larvae and got three imagos, one male and two females, in 1885." Type locality "fixed" (dos Passos and Grey, p. 9, 1947) as Bighorn, Treasure County, Montana. A homonym of Argynnis cypris Meigen [1828]<sup>21</sup>, Syst. Beschreib. Europ. Schmett. 1(?) : 59-60, no. 13.
- ethne, Argynnis Hemming, Dec. 1933 [before 19th]<sup>22</sup>. Entomologist 66(847): 276, no. 10. Proposes a new name for Argynnis cypris

23, 1900... No. 632 in the Canadian National Collection. Allotype - ♀, Calgary, Alta., July 12, 1900... in the Canadian National Collection. Paratypes - 4 ♂, 12 ♀, Calgary, Alta., various dates; 1 ♀, Lethbridge, Alta., Aug. 7... 2 ♂, 5 ♀, Waterton Lakes, Alta... various dates in July."

callippe, Argynnis Boisduval. 1852 [Aug.]<sup>24</sup>. Ann. Soc. Ent. France. 2nd. Ser. 10(2): 302, no. 43. ♂ and ♀ described. "Vole en juin au bord des forets." Article Title indicates "Californie" as habitat. No date nor series data given. Type locality "fixed" (dos Passos, p. 14, 1947) as San Francisco, San Francisco County, California. Spelled calippe by Gunder, p. 9, Entomological News, vol. 36, 1925.

comstocki, Argynnis calippe Gunder. 5 Jan. 1925. Entomological News 26(1): 8-9, no. 10; plate I, figs. 6-7. "Data: Holotype ♂ (Author's Coll.), Los Angeles, Los Angeles County, California, May 26, 1919. Allotype ♀ (Author's Coll.), Los Angeles, Los Angeles County, California, May 20, 1920. Paratypes 11-♂ and 5-♀, same locality and similar dates, in collections of Mr. Chas. Ingham and author. Paratypes and topotypes will be deposited with the Southwest Museum, and the Academy of Sciences, San Francisco, California."

creelmani, Argynnis comstocki Gunder. 30 June 1934. Canadian Ent. 66(6): 127. "Holotype - ♂, expanse 48 mm.; East San Diego, California, June 13, 1933. Type in Author's coll."

elaine, Speyeria callippe dos Passos and Grey. 14 Sept. 1945. Amer. Mus. Novitates. No. 1297: 5; figs. 13-14. "Type Material: The holotype male and allotype female are from Butte Falls, Oregon, May 21, 1931 (ex J. D. Gunder collection). There are 70 paratypes from Jackson County, southern Oregon, as follows: 6 pairs, Ashland, June (T. B. Blevins, Jr., collection); 2 males, Hyatt Lake, June 29-30 (D. B. Stallings collection); 17 males and 4 females, Butte Falls, May 11-21 (L. P. Grey collection); 3 males and 6 females, Roxy Ann, near Medford, June 30 - July 12 (L. P. Grey collection); 4 males, Butte Falls, May 19-23 (C. F. dos Passos collection); 2 pairs, Siskiyou Summit, June 28-29, 1939 (M. Doudoroff, C. F. dos Passos collection); 8 males and 4 females, Butte Falls, May 17-June 24 (ex J. D. Gunder collection); 2 females, Medford, May 30-June 6 (ex J. D. Gunder collection); 1 male and 1 female, Butte Mountains, July 12-13 (ex W. C. Wood collection); 1 female, Siskiyou Pass, June (ex J. D. Gunder collection); 1 female, Keene Creek, June 24 (G. Malcomb, ex J. D. Gunder collection). All of the specimens were collected by W. F. Lawrence, unless otherwise credited. The holotype, allotype, and the 18 paratypes ex J. D. Gunder and ex W. C. Wood collections are in the American Museum of Natural History. The other paratypes are in the collections of T. B. Blevins, Jr., D. B. Stallings, as above noted, and the authors."

gallatini, Argynnis nevadensis McDunnough. 3 June 1929. Canadian Ent. 61(5): 106-107. "Holotype. - ♂, Elkhorn Ranch, Upper Gallatin Canyon, Mont[ana]., Aug. 1, (J. McDunnough); No. 2954 in the Canadian National Collection, Ottawa. Allotype. - ♀, same locality, Aug. 3. Paratypes. - 9 ♂, same locality, Aug. 1, 6."

Edwards, 21 Apr. 1886 which is a homonym of Argynnis cypris Meigen [1828]<sup>21</sup>. See Argynnis cypris Edwards for specimen data.

hughi, Speyeria aphrodite Clark and Clark. 20 Dec. 1951. Smithsonian Misc. Coll. 116(7): 126. Only ♂ described. No date nor locality data given. In a previous article where A. H. Clark used the name (Nomen nudum), he said, "... only known from a single bog in Essex, Mass[achusetts]."

manitoba, Argynnis Chermock and Chermock. 30 Apr. 1940. Canadian Ent. 72(4): 83. "Holotype - ♂, July 29, 1934, Sand Ridge, Manitoba [, Canada]. Allotype - ♀, August 5, 1934, Sand Ridge, Manitoba. Paratypes - 1 to 150, all from the same locality". "All the holotypes will be deposited in the Canadian National Collection and the allotypes in the Carnegie Museum" (from opening paragraph of article containing description).

mayae, Argynnis aphrodite cypris Gunder. 31 Dec. 1932. Canadian Ent. 64(12): 279. "Holotype - ♂... Sand Ridge, Bener Dam Lake, near Kelwood, Man[itoba]., Can[ada]., Sept. 10, 1931. Allotype - ♀... same location, Aug. 17, 1930. Types in Author's coll..."

suffusa, Argynnis alcestis Wolcott. 1 Mar. 1916. Entomological News 27(3): 97-98; pl. 4, fig. 5. "This form is described from one male specimen collected in a bog south of Grand Rapids, Michigan, in August, 1897."

whitehousei, Argynnis Gunder. 31 Dec. 1932. Canadian Ent. 64(12): 279-280. "Holotype - ♂... allotype - ♀... Jaffray, B[ritish]. C [olumbia]., Aug. 5, 1929. Paratypes - 2 ♂ and 2 ♀, same locality and dates, one pair deposited in the Canadian National Collection at Ottawa, Ont., and one pair placed in the U.S. National Museum (Barnes Coll.), Washington, D. C. Types in Author's coll., including a fine lot of topotypes and others from Cranbrook, B. C., which is nearby."

winni, Argynnis aphrodite Gunder. 31 Dec. 1932. Canadian Ent. 64 (12): 278-279. "Holotype - ♂... St. Calixte de Kilkenny, Cue[bec]. (about 40 miles from Montreal), July 13, 1931. Allotype-♀ ... Shawbridge, Que., Aug. 4, 1930. Paratypes - 3 ♂ and 3 ♀, similar localities and dates, one pair deposited in Canadian National Collection, Ottawa, Can., and one pair deposited in U. S. National Museum (Barnes Coll.), Washington, D. C. Types in Author's coll. including a series of topotypicals."

## 2. ARGYNNIS ATLANTIS W. H. EDWARDS.

arizonensis, Argynnis ?aphrodite Elwes. Dec. 1889. Trans. Ent. Soc. London for 1889 (4): 546. Cites Mead in Wheeler Rept., p. 752, 1875. "... was taken... in Arizona, ... occurs also in Colorado though it is very rare" (from Mead). No date, sex nor series data given. Type locality "fixed" (dos Passos and Grey, p. 19, 1947) as Rocky Can[y]on, [ ? Chochise County], Arizona.

atlantis, Argynnis W. H. Edwards. [1862, Feb. - 25 Apr.]<sup>6</sup>. Proc. Acad. Nat. Sci. Philadelphia [14] (1-2): 54-55. ♂ and ♀ described. "This species seems to be limited to mountainous districts of the Northern States and to parts of British America. In the Catskill Mountains, near the Mountain House, I found it abun-



dant, the past season (1861). I have received it from the White Mountains, from Williamstown, Mass[achusetts]., and from Lake Winnipeg... from near Hudson's Bay... the specimens from the White Mountains and Hudson's Bay are diminutive in size. There is also a specimen in the cabinet of the late Dr. Harris... taken... on the north side of Lake Superior." No date nor series data given.

beani, *Dryas atlantis* Barnes and Benjamin, 8 Dec. 1926. Bull. Sou. California Acad. Sci. 25(3): 92, no. 160b. "Type locality: Banff, Al[ber]ta. Number and sexes of types: Holotype ♂, 8-15 Aug., Allotype ♀, 8-15 Aug. 3♂ 3♀ Paratypes, 8-15 Aug., 15-23 Aug., and no date."

canadensis, *Argynnis atlantis* dos Passos, 4 May 1935. Canadian Ent. 67(4): 85-87. "18 ♂ 34 ♀, July 20- September 12. Holotype - ♂ July 20, 1934, Doyles Station, Newfoundland. Allotype - ♀, August 8, 1934, Doyles Station, Newfoundland. Paratypes - Six pairs, all from Doyles Station, Newfoundland, in 1934. (4 ♂ July 20, 2 ♂ August 3, 4 ♀ August 8, 1 ♀ August 18, 1 ♀ Aug. 23). The types have been deposited with the American Museum of Natural History and one pair of paratypes with the Canadian National Museum and Los Angeles Museum. The remainder are in the author's collection. A ♂ and ♀ in the collection of the Carnegie Museum, taken in copulation (pair No. 1) on July 21, 1934, by Dr. Brooks on Wood Road near Camp 31, Lomond, four miles south of Bonne Bay, west coast of Newfoundland, are also designated paratypes."

chemo, *A[rgynnis] a[tlantis]*. Scudder, 1 Feb. 1889. Butt. East. United States and Canada 1(4): 573-574. "... female... taken July 1, 1887, at Lake Chemo, ten miles northeast of Bangor, M[ain]e." Also mentions a slightly suffused male from the White Mountains, [New Hampshire].

chitone, *Argynnis* W. H. Edwards, May 1879. Canadian Ent. 11(5): 82. ♂ and ♀ described. "From several examples... taken in Southern Utah and Arizona." No date data given. Type locality "fixed" (dos Passos and Grey, p. 19, 1947) as Cedar Breaks National Monument, Iron County, Utah.

cornelia, *Argynnis* W. H. Edwards, 28 Apr. 1892. Canadian Ent. 24(5): 106-107. ♂ and ♀ described. "This species flies with *Electa* and *Hesperis*, at Ouray and Manitou, Colorado, and in the adjacent districts, where it has been taken abundantly by Prof. Owen. Mr. Bruce has taken it also at Crested Butte in the Ouray region". "Described from nearly 40 examples sent me by Prof. Owen and Mr. Bruce." No date data given. Type locality "fixed" (dos Passos and Grey, p. 20, 1947) as Ouray, Ouray County, Colorado.

cottlei, *Argynnis* J. A. Comstock, 15 Nov. 1925. Bull. Sou. California Acad. Sci. 24(3): 64-65. "Type, ♀ near Alturas, Modoc Co [unty]., Calif[ornia]. No date given. In the collection of Mr. J. E. Cottle..."

dennisi, *Argynnis lais* Gunder, 31 Dec. 1927. Canadian Ent. 59(12): 287, no. 21; plate B, figs. 21, 21a. "Data: Holotype ♂... Beulah, Man[itoba]., Can[ada]... June 28, 1910. To be placed in the National Coll. at Ottawa..."

dodgei, Argynnis Gunder, 10 Sept. 1931, Bull. Sou. California Acad. Sci. 30(2): 46. "Holotype ♂... July 10, 1930; allotype ♀... July 17, 1931, Diamond Lake, Douglas Co[unty]., Oregon. Type in Author's coll. Paratypes - 10 ♂, and 3 ♀; same place and dates. One pair deposited in the Canadian Nat. Coll. at Ottawa and one pair in the Nat. Museum (Barnes Coll.) at Washington."

dorothea, Speyeria atlantis Moeck, 13 June 1947, Entomological News 58(3): 73-75. "Type Material: A long series of dorothea was collected by the author on Sandia Peak (Sandia Peak is in extreme southeastern Sandoval County bordering upon Bernalillo County, some fifteen miles northeast of and overlooking Albuquerque), Sandia Mountains, New Mexico, July 13 to 15, 1946, at elevations ranging from six to over ten thousand feet. The specimens were taken from the very peak to two-thirds of the way down the mountain, along the winding road which leaves Highway 44 and runs thence to the tip in a general southwesterly direction. The holotype and allotype female were taken in copula, July 15, at about 7,000 feet elevation. They have been deposited in the American Museum of Natural History, New York City. Of the type catch mentioned above, 100 males and 100 females are designated paratypes which are in the author's collection; a number of them will be distributed to various museums and individuals."

electa, Argynnis W. H. Edwards, Mar. 1878, Field and Forest 3(9): 143-144, ♂ and ♀ described. "From 12 ♂ 4♀ received from Colorado. Several of these were taken in the north of that state by Mr. Mead in 1871, and I have until recently been undecided respecting them, but others, fresh and uninjured specimens, received from Mr. Morrison, and taken in the South in 1877, leaves no doubt in my mind as to the distinctness of this species." No date data given. Type locality "fixed" (dos Passos and Grey, p. 20, 1947) as Rocky Mountain National Park, Colorado.

greyi, Argynnis atlantis Moeck, 22 May 1950, Entomological News 61(3): 61-64. "Type Material: The holotype male was taken by the author in Lamoille Canyon, Ruby Mountains, Elko County, Nevada, on July 24, 1949, at an elevation of about 8,500 feet. The allotype female was taken in the same valley on July 27, at an elevation nearer 8,000 feet. There are 21 paratypes, as follows: 10 males and 3 females taken in, near, or above Lamoille Canyon, ranging in elevation from 7,000 to 10,000 feet; 4 males and 3 females taken along the snow of glaciers, close to 10,000 feet, above Angel Lake, East Humboldt Range, Elko County, Nevada on July 29, 1946; and 1 male at the Angel Lake area on July 29, 1949."

helena, Speyeria (Speyeria) atlantis dos Passos and Grey. [Before 12 Mar. 1957]<sup>22</sup>. Jour. New York Ent. Soc. 63(in 1): 95-96. Propose new name for Argynnis lais W. H. Edwards, 17 Jan. 1884, which is a homonym of Arg. lais Scudder, Mar. 1875, (see Boloria). See lais W. H. Edwards for details.

hesperis, Argynnis W. H. Edwards. [9 May 1864]<sup>7</sup>. Proc. Ent. Soc. Philadelphia 2(4): 502-503. Only ♂ described. "From the Rocky Mountains." No date nor series data given. Type locality "fixed"

(dos Passos and Grey, p. 19, 1947) as Turkey Creek Junction, Jefferson County, Colorado.

hollandi, *Argynnis atlantis* Chermock and Chermock, 30 Apr. 1940. Canadian Ent. 72(4): 82-83. "Holotype -  $\sigma$ , July 24, 1934, Riding Mountains, Manitoba [, Canada]. Allotype -  $\varphi$ , July 16, 1937, same locality. Paratypes - 1 to 550, Riding Mountains, and Sand Ridge, Manitoba". "All the holotypes will be deposited in the Canadian National Collection and the allotypes in the Carnegie Museum." (from preliminary paragraph of article containing this description).

hutchinsi, *Argynnis atlantis beani* Gunder, 31 Dec. 1932, Canadian Ent. 64(12): 280. "Holotype -  $\sigma$ ... Twp. 2N. Range 1W., Jefferson County, Mont[ana]., July 21, 1929. Type in Author's coll."

irene, *Argynnis* Boisduval. [1869, before 1 Nov.]<sup>8</sup>. Ann. Soc. Ent. Belgique 12: 59-60, in no. 53 (in part). "Cette Argynne [egleis, of which he considered irene a variety] est très comme dans lieux incultes et aux bords des forêts, dans l'intérieur de la Californie." No sex nor date data given. He speaks of having compared more than 100 examples (composed of egleis and irene). Type locality "fixed" (dos Passos and Grey, p. 20, 1947) as Massack, Plumas County, California.

lais, *Argynnis* W. H. Edwards, 17 Jan. 1884. Canadian Ent. 15(11): 209. "From several examples, male and female, taken at Red Deer River..." No date data given. Type locality "fixed" (dos Passos and Grey, p. 20, 1947) as Edmonton, Alberta [, Canada]. A homonym of Arg. lais Scudder, Mar. 1875, (see Boloria).

lurana, *Speyeria atlantis* dos Passos and Grey, 14 Sept. 1945. Amer. Mus. Novitates, No. 1297: 8-9; figs. 23-24. "Type Material: The type series is from the Black Hills of South Dakota. The holotype male and the allotype female are from Harney Peak, June 25, 1939 (A. C. Frederick, ex L. P. Grey collection). There are 32 paratypes as follows: 10 males and 5 females, same data as holotype; 10 males, Spearfish Canyon, near Lead, July 1, 1939 (A. C. Frederick, L. P. Grey collection); 5 males and 2 females, Custer, 1928 (C. F. dos Passos collection). The holotype, allotype, and a series of paratypes are in the American Museum of Natural History. The other paratypes are in the collections of the authors."

nausicaa, *Argynnis* W. H. Edwards, Oct. 1874. Trans. American Ent. Soc. 5(?) signs. 13-14: 104-105. "From 2  $\sigma$ , 1  $\varphi$ , taken by Mr. Henshaw, August 21, 1874, at Rocky Canon, Arizona."

nikias, *Argynnis* Ehrmann, 15 May 1917. The Lepidopterist, Offic. Bull. Boston Ent. Club 1(7): 55-56,  $\sigma$  described. "Habitat; Temez Springs, New Mexico. Types in my collection." No series nor date data given. Spelled nickias by dos Passos, Canadian Ent. 67: 86, 1935.

sehllbachi, *Speyeria atlantis* Garth, 20 June 1949. Bull. Sou. California Acad. Sci. 48(1): 1-4; figs. 1-4. "Type material: Male holotype, AHF [Allen Hancock Foundation] No. 471, and female allotype, AHF No. 471a, from Neal Springs, North Rim, Grand Canyon National Park, Coconino County, Arizona, 8,175 feet,

- July 5, 1947, collected by John S. Garth, Allen Hancock Foundation survey party. Twenty paratypes as follows: "[10 ♂ and 10 ♀, Grand Canyon areas, July 5 - Aug. 19, 1939 - 1947]."
- tetonia, Speyeria atlantis dos Passos and Grey. 14 Sept. 1945, Amer. Mus. Novitates, No. 1297: 9-10; figs. 27-28. "Type Material: The type series is from the Teton Mountains region, Wyoming. The holotype male is from the Teton Mountains, July 11, 1931 (ex J. D. Gunder collection), and the allotype female is from the same locality, June 25, 1931 (ex J. D. Gunder collection). There are 38 paratypes as follows: 1 pair, same locality, June 29 - July 18; 2 males and 3 females, Moose Post Office, Jackson Hole, July 9-August 3 (A. B. Klots, the American Museum of Natural History); 1 male, Jackson, 6000 feet, July 13-17, 1920 (the American Museum of Natural History); 2 males and 4 females, Moose Post Office, Jackson Hole, 6000 to 7000 feet, July 15-August 3, 1929 (A. B. Klots, C. F. dos Passos collection); 8 males, Teton Mountains, July 1-21, 1943, and 8 pairs, Jackson Hole, July 14-August 9, 1937 (L. P. Grey collection)."
- viola, Speyeria atlantis dos Passos and Grey. 14 Sept. 1945, Amer. Mus. Novitates, No. 1297: 10; figs. 29-30. "Type Material. The type series is from the Sawtooth Mountains, Idaho. The holotype male is from Trail Creek, 7400 feet, July 11, 1931, and the allotype female is from Camp Creek, August 9, 1931 (C. W. Herr, ex J. D. Gunder collection). There are 23 paratypes as follows: 2 males, same data as holotype; 5 males and 1 female, Camp Creek, July 9; 2 males and 3 females, Deadwood Creek of Payette River, Boise County, 6800 feet, July 18; 2 females, Deadwood Summit, July 18; 1 male, Park Canyon, 7500 feet, July 10; 1 male, Wood River, July 17; 1 male, Summit Creek, 7800 feet, July 13; 1 male, Kane Creek, 8500 feet, July 8 (all preceding, ex J. D. Gunder collection); 3 males and 1 female, Custer County, July 18 - 21, 1933 (L. P. Grey collection). The holotype, allotype, and a series of paratypes are in the American of Natural History. The other paratypes are in the collections of the authors."
- wasatchia, Speyeria atlantis dos Passos and Grey. 14 Sept. 1945, Amer. Mus. Novitates, No. 1297: 8; figs. 25-26. "Type Material: the holotype male and the allotype female are from Payson Canyon, Payson, Utah, July 16, 1932 (L. D. Pfouts, ex J. D. Gunder collection). There are 44 paratypes as follows: 8 pairs, same locality and collector, July 15-28 (ex J. D. Gunder collection); 13 males and 7 females, July 3-29, same locality and collector (L. P. Grey collection); 4 pairs, same locality, July 9-29 (T. Spalding, C. F. dos Passos collection). The holotype, allotype, and a series of paratypes are in the American Museum of Natural History. The other paratypes are in the collections of the authors."
3. ARGYNNIS CALLIPPE BOISDUVAL.
- baroni, Argynnis liliana W. H. Edwards. [11 Mar. 1881]23. Trans. American Ent. Soc. 9(1) signs. 1: 2-3. ♂ described. No date nor series data given. Locality: ? North California.
- calgariana, Argynnis nevadensis McDunnough. 29 Feb. 1924. Canadian Ent. 56(2): 42. "Holotype - ♂, Calgary, Al[ber]ta., June

brought to notice by Mr. Mead, who took a single male in perfect condition at Turkey Creek Junction, in Colorado in 1871. Subsequently a female was brought in by the Hayden Yellowstone Expedition, taken the same season. "Type locality "fixed" (dos Passos and Grey, p. 16, 1947) as Turkey Creek Junction, [Jefferson County], Colorado. Spelled meadi by Holland, p. 99, Butt. Book, rev. ed., 1931.

nevadensis, Argynnis W. H. Edwards, Jan. 1870. Trans. American Ent. Soc. 3(1) sign. 2: 14-15. "From 1 ♂, 1 ♀, in the collection of Henry Edwards, Esq., San Francisco. Taken in the valleys of the Sierra, near Virginia City, in 1869.

rupestris, Argynnis Behr. Dec. 1863. Proc. Calif. Acad. Nat. Sci. 3(1) sign. 6: 84, no. 3. "...its inhabiting the steep rocky declivities characterizing the lower part of the Sierra. The specimens were collected... at a moderate elevation above the sea." No sex, series nor date data given, Type locality "fixed" (dos Passos and Grey, p. 15, 1947) as Trinity Center, Trinity County, California.

semivirida, Argynnis nevadensis McDunnough, 29 Feb. 1924. Canadian Ent. 56(2): 42-43. "Holotype - ♂, Aspen Grove, B[ritish]. C[olumbia]. July 14, 1922, (P. N. Vroom); No. 633 in the Canadian National Collection. Allotype - ♀, same data, in the Canadian National Collection. Paratypes - 1 ♂, 2 ♀, same data; 1 ♂, June 28, in the Canadian National Collection."

sierra, Speyeria callippe dos Passos and Grey, 14 Sept. 1945. Amer. Mus. Novitates, No. 1297: 5-6; figs. 15-16. "Type Material: The holotype male is from Gold Lake, Sierra County, California, July 6, 1928 (C. Hill, ex J. D. Gunder collection), and the allotype female is from the same locality, June 27, 1931 (F. W. Friday, ex J. D. Gunder collection). There are 28 paratypes as follows: 15 male and 7 female (ex J. D. Gunder collection); 5 males and 1 female (L. P. Grey collection), all from Gold Lake, June 23-July 29, all collected by F. W. Friday. The holotype, allotype, and a series of paratypes are in the American Museum of Natural History. The other paratypes are in the collections of the authors."

wrighti, Argynnis W. G. Wright, 10 Oct. 1905. Butt. West Coast United States; p. 139, no. 134. Inadvertently gives a new name for his own Argynnis [laura] laurina. See laurina for data.

#### 4. ARGYNNIS CORONIS BEHR.

bernadensis, Argynnis semiramis Gunder, 2 Sept. 1933. Canadian Ent. 65(8): 172-173. "Holotype - ♀... Camp Wasewgan for Boy Scouts, San Bernardino Mts., San Bernardino Co[unty]., Calif[ornia]., July 14, 1932. Type in Author's coll."

californica, Argynnis Skinner, 3 July 1917. Entomological News 28 (7): 328. ♂ and ♀ described. "Described from fifteen specimens from California, the type and paratypes were taken... at Alma, Santa Clara County." No date data given

coronis, Argynnis Behr. [1-7 Mar. 1865]7. In W. H. Edwards. Proc. Ent. Soc. Philadelphia 3(pp. 327-708): 435, no. 2. No locality, sex, date, nor series data given here. Behr, p. 173, no. 2, Proc. California Acad. Nat. Sci., vol. 2, 1858-1863 says "This

- gerhardi, Argynnis nevadensis meadii Gunder. 31 Dec. 1927. Canadian Ent. 59(12): 287, no. 24; plate B, figs. 24, 24a. "Data: Holotype  $\sigma$ ... Colorado (D. Bruce), no date. In the Strecker Coll., Field Museum, Chicago..."
- harmonia, Speyeria callippe dos Passos and Grey. 14 Sept. 1945. Amer. Mus. Novitates. No. 1297: 6-7; figs. 17-18. "Type Material: The holotype male is from Mount Wheeler (Snake Range near Utah border, Nevada, June 24, 1949 (ex J. D. Gunder collection), and the allotype female is from Mount Wheeler, White Pine County, Nevada, June 30, 1929 (F. W. Morand, ex J. D. Gunder collection). There are 36 paratypes as follows: 30 males and 6 females, same locality as allotype, June 8-July 5, 1929 (F. W. Morand, ex J. D. Gunder collection). The holotype, allotype, and a series of paratypes are in the American Museum of Natural History. The other paratypes are in the collections of the authors."
- inornata, Argynnis W. H. Edwards. Feb. 1872. Trans. American Ent. Soc. 4(1-2) sign. 8: 64 (completed on page 65 in sign. 9). "From a pair belonging to the collection of James Behrens, Esq., of San Francisco, and taken at Downieville, California." No date data given.
- juba, Argynnis Boisduval. [1869, before 1 Nov.]<sup>8</sup>. Ann. Soc. Ent. Belgique 12: 60, no. 54.  $\sigma$  and  $\text{♀}$  described. "M. Lorquin qui l'a prise en un certain nombre d'exemples dans les prairies élevées de la Juba..." No date data given. Type locality "fixed" (dos Passos and Grey, p. 15, 1947) as Downieville, Sierra County, California.
- laura, Argynnis W. H. Edwards. Mar. 1879. Canadian Ent. 11(3): 49-50. "Nevada" (from article title). "From 4  $\sigma$ , 1  $\text{♀}$  taken by Mr. Morrison, and 1  $\sigma$ , 1  $\text{♀}$  formerly sent me by Mr. Henry Edwards." No date data given. Type locality not "fixed" (dos Passos and Grey, p. 15, 1947) pending further collecting.
- laurina, Argynnis [laura] W. G. Wright. 10 Oct. 1905. Butt. West Coast United States; pp. 138-139, no. 134; plate 15, fig. 134.  $\sigma$  and  $\text{♀}$  described. No locality nor series data given. The specimen illustrated by figure 134 was taken "June 20, 1888". "It flies with laura..." (his laura were taken in "S. Cal. Mountains..." Type locality "fixed" (dos Passos and Grey, p. 16, 1947) as Greenhorn Mountains, Kern County, California.
- liliana, Argynnis Henry Edwards. 1877. Proc. California Acad. Sci. 7(1): 170. "I have taken it for three seasons near St. Helena, Napa Co[unty], [California,] and altogether have had before me thirty-four  $\sigma$  and seven  $\text{♀}$ ..." No date data given. Type locality data is supplemented (dos Passos and Grey, p. 14, 1947) to [Bale Station], near [Mount] St. Helena, Napa, Co[unty], California].
- macaria, Argynnis W. H. Edwards. Nov. 1877 - [Dec. 1877]25. Field and Forest 3(5): 86-87. "From three  $\sigma$  one  $\text{♀}$  sent me by Henry Edwards, Esq., and taken at Havilah, California." No date data given.
- meadii, Argynnis W. H. Edwards. Mar. 1872. Trans. American Ent. Soc. 4(1-2) sign. 9: 67-68. "This ... species was first

- species [No. 2, not named] frequents several localities near the Bay of San Francisco. . . " Type locality "fixed" (dos Passos and Grey, p. 11, 1947) as Alma, Santa Clara County, California.
- gunderi, Argynnis J. A. Comstock. 15 Nov. 1925. Bull. Sou. California Acad. Sci. 24(3): 67-68. "Types: holotype ♂ Modoc Co [unty]., Calif[ornia]., June 3, 1924. Allotype ♀ Modoc Co., Calif., July 7, 1924. Both coll. author. Paratype. Buck Creek, Modoc Co., July 21, 1922. Coll. Jean Gunder. "
- halycone, Argynnis W. H. Edwards [May 1869] 26. Butt. N. America 1(3): [81]. plate [28], 2 unnumb. figs. "Female unknown". "From two specimens, taken in Colorado by Dr. Velie, and now in the collection of B. D. Walch, Esq. of Rock Island. " No date data given. Type locality "fixed" (dos Passos and Grey, p. 12, 1947) as Estes Park, Larimer County, Colorado.
- hennei, Argynnis Gunder. 30 June 1934. Canadian Ent. 66(6): 126-127. "Holotype - ♂. . . Allotype - ♀. . . near summit, elevation 7700 ft., Mt. Pinos, Frazier Mountain Park, Santa Barbara Nat. Forest, Ventura Co[unty]., Calif[ornia]., July 10, 1933. Types in Author's coll., including one pair of paratypes (and general series), same place and date. One similar pair of paratypes in Henne coll. Three ♂ paratypes in Comstock coll., Los Angeles Museum, dated June 10 and 13th, 1932, same locality, but lower elevation. One ♂ and one ♀ paratype in collection of W. H. Ireland of Taft, Calif., dated July 3, 1933. A long series of topotypicals is also in the Henne coll. from which he expects to supply examples to Washington and Ottawa. "
- semiramis, Argynnis W. H. Edwards. 21 Apr. 1886. Canadian Ent. 18(4): 61-62. "From San Bernardino, California, taken by Mr. W. G. Wright. I have upwards of 30 examples of this species, male and female. . . " No date data given.
- simaetha, Speyeria coronis dos Passos and Grey. 14 Sept. 1945. Amer. Mus. Novitates. No. 1297: 2-3; figs. 5-6. "Type Material: the holotype male is from Black Canyon, Cascade Mountains, near Brewster, Washington, June 25, 1939, and the allotype is from the same locality, June 20, 1940 (J. C. Hopfinger, L. P. Grey collection). There are 70 paratypes as follows: 2 pair, same locality and collector, June 10-July 20 (L. P. Grey collection); 3 males, same locality and collector (C. F. dos Passos collection). The holotype and allotype are in the American Museum of Natural History. The paratypes are in the collections of the authors. "
- snyderi, Argynnis Skinner. 4 June 1897. Canadian Ent. 29(6): 154 ♂ described. "I have specimens from Salt Lake City, Utah, taken June 23rd, 1895, and a female from Ogden, July 6th, 1895." Type locality "fixed" (dos Passos and Grey, p. 11, 1947) as City Creek Canyon, Salt Lake City, Salt Lake County, Utah.
5. ARGYNNIS CYBELE (FABRICIUS).
- baal, Argynnis cybele Strecker. 1878 [June - before 8 Nov.]<sup>27</sup>. Butt. and Moths N. Amer., Compl. Syn. Catal., p. 111, no. 193a, ♂ described. "Ohio." No date given. Type locality data supplemented (dos Passos and Grey, p. 6, 1947) with "[Toledo, Lucas County]".

- carpenterii, Argynnis W.H. Edwards, Apr. 1876. Trans. American Ent. Soc. 5(?) sign. 26: 204-205. "From 2 ♂ 1 ♀, taken in New Mexico, above timber line..." No date data given. Type locality data supplemented (dos Passos and Grey, p. 7, 1947) with "[Taos Peak, Taos County]". Spelled carpenteri by Holland, p. 87, Butt. Book, rev. ed., 1931.
- charlottii, Argynnis Barnes, 1 Feb. 1897. Canadian Ent. 29(2): 39-40. "Types. - 1 ♂ and 2 ♀s in my collection, from Glenwood Springs, Colorado". No date data given. Spelled charlotti by Barnes and McDunnough, Feb. 1917, Check List Lepid. Boreal America, p. 8, no. 157.
- cybele, Papilio, Nymphalis, Phaleratus. Fabricius, 1775 [17 Apr.]<sup>3</sup>. Systema Entomologicae; p. 516, no. 311. "Habitat in America." No sex, date, nor series data given. Type locality "fixed" (dos Passos and Grey, p. 6, 1947) as New York City, New York County, New York.
- daphnis, Papilio, Nymphalis, Phaleratus. Cramer. [1776]<sup>3</sup>. Utiland, Kapellen Voorkom. Drei Waereld-Deelen Asia, Africa en America 1(8): 152. The butterfly (without a full name - described earlier on page 89) was figured (E-F) on plate 57 in part 5. "Men vindt ze te Nieuw-York en te Jamaika." No date, sex nor series data given. Type locality "fixed" (dos Passos and Grey, p. 6, 1947) as New York City, New York County, New York. A homonym of Papilio daphnis [Denis and Schiffermüller] 1775 [8 Dec.]<sup>3</sup>.
- daphnis?, Papilio Nymphalis, Phaleratus. Martyn, 1797. Psyche, Figures Nondescript Lepid. Ins., or Rare Moths and Butt. from Differ. Parts of World (?): 7, 7; plate [3], fig. [7]; plate [4], fig. [9]. "This, which is a male from Surinam." No date data given. Type locality "fixed" (dos Passos and Grey, p. 6, 1947) as New York City, New York County, New York. A homonym of Papilio daphnis [Denis and Schiffermüller] 1775 [8 Dec.]<sup>3</sup> and Pap. Nymph. Phalerat. daphnis Cramer [1776]<sup>3</sup>.
- krautwurmi, Argynnis cybele Holland, 6 June 1931. Ann. Carnegie Mus. 20(2) art. 8: 255-256. "Described from four female specimens, type and paratypes, from Les Cheneaux, Upper Peninsula of Michigan. No date data given.
- lethe, Argynnis leto Gunder, 30 June 1934. Canadian Ent. 66(6): 125. "Holotype - ♀... Big Horn Mts., Wyoming... Aug. 3, 1932. Type in Author's coll."
- letis, Argynnis leto W.G. Wright, 10 Oct. 1905. Butt. West Coast United States; p. 130, no. 111; pl. 12, fig. 111. "Plate XII, Figure 111, Male; Sisson, California., August, 1891; Author."
- leto, Argynnis Behr. Dec. 1862. Proc. Calif. Acad. Nat. Sci. 2(sign. 12): 173, no. 3. ♂ and ♀ described. "This species has been discovered... in a sequestered valley near Carson City" [, Nevada]. No date nor series data given.
- letona, Speyeria cybele dos Passos and Grey, 14 Sept. 1945. Amer. Mus. Novitates. No. 1297: 1-2; figs. 3-4. "Type Material: The holotype male and allotype female are from City Creek Canyon, Salt Lake City, Utah, 4500 feet, July 17, 1939 (W.L. Phillips, L.P. Grey collection). There are 41 paratypes as follows: 24



males and 12 females, same locality and collector, July 5- August 24, 1939-1943 (L. P. Grey collection); 4 males Mill Creek, American Fork Canyon, Utah County, August 6, 1932 (ex J. D. Gunder collection). The holotype, allotype, and a series of paratypes are in the American Museum of Natural History. The other paratypes are in the collections of the authors."

novascotiae, Argynnis cybele McDunnough, 2 Feb. 1935. Canadian Ent. 67(1): 18-19. "The types are as follows: Holotype - ♂, White point Beach, Queens Co[unty]., N[ova]. S[cotia]., July 29 (J. McDunnough); No. 3859 in the Canadian National Collection, Ottawa. Allotype - ♀, same locality, July 25. Paratypes - 1 ♂, 9 ♀, same locality, July 18, 24, 25, 28, 29; 10 ♂, S. Milford, N.S., June 30, July 5, 8, 9."

pseudocarpenteri, Argynnis cybele Chermock and Chermock, 30 Apr. 1940. Canadian Ent. 72(4): 82. "Holotype - ♂, July 19, 1934, Sand Ridge, Manitoba [, Canada]. Allotype - ♀, July 7, 1937, Riding Mountains, Manitoba. Paratypes - 1 to 250, Riding Mountains, Manitoba; Sand Ridge, Manitoba; Miniota, Manitoba; Banff, Alberta, and McCreary, Manitoba."

pugetensis, Speyeria cybele Chermock and Fretchin, 30 Oct. 1947. Pan-Pacific Ent. 23(3): 111-112. "Holotype, male, July 12, 1945, Stimson Creek, near Belfair, Mason County, Wash[ington]. Allotype, female, August 4, 1945, Stimson Creek, near Belfair, Mason County, Wash. Paratypes 1-390, various localities in Mason, Kitsap, Thurston and Callam counties, Wash. Paratypes 391-400, Portland and McMinnville, Oregon. The holotype, allotype and paratypes will be deposited in the collection of the American Museum of Natural History. Paratypes will also be distributed to other museums, specialists, and private collections."

valesinoidesalba (emendatio), Acidalia (Semnopsyche) leto Reuss, 10 Apr. 1926. Deutsche Ent. Zeitschrift (Berliner Ent. Zeit. and Deutsche Ent. Zeit. Weider.) Jahrg. 1926(1): 69. ♀ described. No. date, locality nor series data given. "... Typen im Berliner Museum." Originally spelled valesinoides-alba.

6. ARGYNNIS DIANA (CRAMER).

diana, Papilio. Nymphalis. Phaleratus. Cramer. [1777]<sup>3</sup>. Uitland. Kapellen Voorkom. Drei. Waereld-Deelen Asia, Africa en America 2(16): 148. ♂ figured. The butterfly (without full name) was described earlier on page 4 and figured (D-E) on plate 98 in Volume 1, pt. 9. From page 3 (in text of maja): "en Virginie". No date, sex nor series data given. Type locality "fixed" (dos Passos and Grey, p. 6, 1947) as Jamestown, James County, Virginia.

7. ARGYNNIS EDWARDSII REAKIRT

edonis, Argynnis edwardsii Gunder, 30 June 1934. Canadian Ent. 66 (6): 125. "Holotype - ♀... Beaver City, Larimer County, Colorado (10-12, 000 ft.), collected... on Aug. 1, 1892". "Holotype to be placed in the Calif. Academy of Sciences at San Francisco," edwardsii, Argynnis Reakirt, June 1866. Proc. Ent. Soc. Philadelphia 6(pp. 121-152): 137-139. ♂ and ♀ described. "Hab. - California; Pike's Peak, Colorado Territory; Washington, D. C. ? (Coll. W. H. Edwards.) Rocky Mountains. (Coll. Ent. Soc.)"

"Mr. Ridings informs me that he collected this species in August, near Empire City, Colorado Territory, in the heart of the mountains only. It would seem to be rare, since he captured but three specimens (1 ♂, 2 ♀)...". Type locality "fixed" (dos Passos and Grey, p. 10, 1947) as Pike's Peak, Teller County, Colorado. Spelled edwardsi by Holland, p. 99, Butt. Book, rev. ed., 1931.

montana, A[cidalia]. edwardsi Reuss. 25 Jan. 1927. Deutsche Ent. Zeitschrift (Berliner Ent. Zeit. and Deutsche Ent. Zeit. Weider.) Jahrg. 1926(5): 439. "...aus Montana". "Typen, ♂ ♀, und Paratypen im Berliner Museum". No date data given. He also refers to text in the Archiv fur Naturgesch. 87A(11): 205, Apr. 1922.

8. ARGYNNIS EGLEIS BEHR.

adiante, Argynnis Boisduval. [1869, before 1 Nov.]<sup>8</sup>. Ann. Soc. Ent. Belgique 12: 61, no. 57. ♂ and ♀ described. "...au bord des bois, dans la partie orientale de la Californie...". No date nor series data given. Type locality "fixed" (dos Passos and Grey, p. 16, 1947) as Santa Cruz, Santa Cruz County, California. Spelled adianthe by Barnes and McDunnough, Check List Lepid. Bor. Amer., p. 8, Feb. 1917.

adiaste, Argynnis W. H. Edwards (Boisduval Ms. name, emended). [1-7 Mar. 1865]<sup>7</sup>. Proc. Ent. Soc. Philadelphia 3(pp. 327-708): 436, no. 7. [California] (from article title). No date, sex nor series data given. Type locality "fixed" (dos Passos and Grey, p. 16, 1947) as Santa Cruz, Santa Cruz County, California. Spelled adraste by Kirby, Syn. Cat. Diur. Lepid., p. 160, 1871.

albrighti, Argynnis Gunder. 31 Dec. 1932. Canadian Ent. 64(12): 281-282. "Holotype - ♂, ... Highwood Mts., Chouteau County, Montana, June 24, 1931. Allotype - ♀, ... same data. Paratype - 1 ♂, Monarch, Cascade County, (just south of the Highwood region), dated July 26, 1931. "Types in Author's coll. ..."

astarte, Argynnis W. H. Edwards (not Doubleday, not Fisher, not W. H. Edwards, 1862). [1-7 Mar. 1865]<sup>7</sup>. Proc. Ent. Soc. Philadelphia 3(pp. 327-708): 435, no. 4. States that "Egleis, Boisduval in lit." is a synonym of "Argynnis Astarte Doubleday". No series, sex nor date data given. The action of dos Passos and Grey in designating a type and fixing the type locality establish this name as a synonym of Argynnis egleis Behr. The name is a homonym of Argynnis astarte of Doubleday, of Fisher, and of W. H. Edwards, 1862.

atossa, Argynnis W. H. Edwards. 1 Oct. 1890. Butt. N. America 3 (10): [127]-[128]; plate [17]: figs. 4-5. ♂ and ♀ described. Edwards states he saw only the pair figured. Male: "...I was told was North American...". Female: "It was taken at Tehachipe, south California... from July 4 to 8th... in a little valley about four miles from town, by a small stream."

boharti, Argynnis montivaga Gunder. 6 Jan. 1930. Bull. Brooklyn Ent. Soc. 24(5): 326-327; pl. 31, fig. 5. "Data: Holotype ♀... Mono Pass Trail (Yosemite to Mono Lake), Calif[ornia].; July 16, 1929. In author's coll. ..."

clemencei, Argynnis adiate J. A. Comstock. 15 Nov. 1925. Bull. Sou. California Acad. Sci. 24(3): 67. "Holotype ♂, Atascadero,

- Calif[ornia]., June 30, 1922... Allotype ♀ same data, locality ... Paratype No. 1. Same date, locality... "
- egleis, A[rgynnis]. Behr (Boisduval Ms. name). Dec. 1862. Proc. California Acad. Nat. Sci. 2(sign. 12): 174, no. 4. "This species is found high up in the mountains". No date, sex nor series data given. Type locality "fixed" (dos Passos and Grey, p. 17, 1947) as vicinity of Gold Lake, Sierra County, California.
- egleis, Argynnis Boisduval. [1869, before 1 Nov.]<sup>8</sup>. Ann. Soc. Ent. Belgique 12: 59-60, no. 53. ♂ and ♀ described. "Cette Argynne est très commune dans les lieux incultes et aux bords des forêts, dans l'intérieur de la Californie". He speaks of having compared more than 100 examples (composed of egleis and irene). No date data given. A homonym of A. egleis Behr, Dec. 1862.
- linda, Argynnis utahensis dos Passos and Grey. 8 Dec. 1942. Amer. Mus. Novitates. No. 1214: 1-2; fig. 1 (left). "Type Material. - Holotype, male, Heyburn Peak, Sawtooth-Boise, Idaho, 9500-10,000 feet, July 15, 1931 (C. W. Herr), Gunder collection, in The American Museum of Natural History. Allotype, female, same data as the holotype and in the same collection. Paratypes: three males, same data; two males, Deadwood, Payette National Forest, Idaho, July 18, 1931 (C. W. Herr); one male, Cape Horn, Challis Payette, Idaho, 7000 feet, July 16-17, 1931 (C. W. Herr); one male, Bear Valley, Challis Payette, Idaho, 7000 feet, July 16-17, 1931 (C. W. Herr); four males, Sawtooth-Lemhi, Idaho, 7500-9500 feet, July 5-17, 1931 (C. W. Herr); and one female, Sawtooth Mountains, Idaho, August 10, 1941 (Dr. and Mrs. R. C. Turner). The male paratypes are from the Gunder collection, and eleven are in the American Museum. Two male and one female paratypes are in the junior author's collection."
- macdunnoughi, Argynnis Gunder. 31 Dec. 1932. Canadian Ent. 64 (12): 280-281. "Holotype - ♂... allotype - ♀... Elkhorn Ranch Resort, Gallatin County, Mont[ana]., Aug. 1, 1928. Types collected by Dr. McDunnough and in the Canadian National Coll. at Ottawa, as well as 2 ♂ paratypes of same date and location. 2 ♂ and 1 ♀ paratypes in Author's Coll., together with a series of males and females taken by Mr. Hutchins, Mr. Wind and Dr. Albright of Great Falls, Montana, in the same region, including the Teton Range south in Wyoming."
- mammothi, Argynnis montivaga Gunder. 8 May 1924. Entomological News 35(5): 157; pl. 2, fig. H. "Data: Holotype ♂, (Coll. of J. Riddell, F. E. S., Hollywood, Calif.) Mammoth Camp, Mono County, California; July 31, 1921. Paratype ♂, (Author's Coll.) Mammoth Camp, Mono County, California; July 28, 1921."
- montivaga, Argynnis Behr. Dec. 1863. Proc. California Acad. Nat. Sci. 3(1) sign. 6: 84, no. 2. "It is not found near the bay [San Francisco Bay], but seems to be widely spread through the Sierra from whence I have specimens collected at different localities. Those obtained by the Geological Survey are from an elevation of 10,500 feet. Type locality "fixed" (dos Passos and Grey, p. 17, 1947) as vicinity of Gold Lake, Sierra County, California. Spelled montivago by Strecker, pages 113 and 114, Butt. and moths N. Amer., Compl. Syn. Catal., 1878. Spelled montivaga by dos Passos and Grey, 1945, Amer. Mus. Nov. (1297): 7.

oweni, Argynnis W. H. Edwards, 28 Apr. 1892. Canadian Ent. 24 (5): 105-106, no. [1] (not 2 as given). "From 87 males and 6 females taken by Professor Edward T. Owen on Mt. Shasta, elevation 7,500 feet [, California]. No date data given.

secreta, Speyeria montiviga dos Passos and Grey, 14 Sept. 1945. Amer. Mus. Novitates, No. 1297: 7-8; figs. 19-20. "Type Material: The holotype male and the allotype female are from Rocky Mountains National Park, Colorado, 8000 feet, July, 1942, collected by Roy Weist (L. P. Grey collection) in the Estes Park area. There are 4 paratypes as follows: 3 male and 1 female with the same data. The holotype and allotype are in the American Museum of Natural History. The paratypes are in the collections of the authors."

tehachapina, Argynnis J. A. Comstock, 5 May 1920. Southwest Science Bulletin; pp. 6-9; plate [1], figs. 7-9. "Described from three males and one female, taken on highest peak in Tehachapi Mts., [California,] July 18, 1918. In the collection of the author, Southwest Museum, Los Angeles."

tejonica, Argynnis atossa J. A. Comstock, 15 Nov. 1925. Bull. Sou. California Acad. Sci. 24(3): 68. "Type. Our example is a ♀ and was taken by Mr. Jean Gunder in the Tejon region (Collins Ranch) [California] on August 12, 1923."

utahensis, Argynnis Skinner, 10 Oct. 1919. Entomological News 30 (8): 216. ♂ and ♀ described. "The type was taken by the writer in City Creek Canyon, Salt Lake City, Utah, July 6th, and the allotype at Silver Lake, Brightons, Utah, July 12th. There are nine paratypes from City Creek Canyon, taken on the 4th to the 6th July. Fourteen specimens from Ogden, Utah, and four from Park City, Utah, taken by A. J. Snyder in the first half of July. Three specimens from Provo, Utah, taken by T. Spalding in July, and four specimens from David Bruce labelled "Utah."

#### 9. ARGYNNIS HYDASPE BOISDUVAL.

caliginosa, Argynnis hydaspe J. A. Comstock, 15 Nov. 1925. Bull. Sou. California Acad. Sci. 24(3): 66. "Type. ♂ Modoc Co[unty]. Cali[ornia]. No date. Collection, Mr. J. E. Cottle."

conquista, Speyeria hydaspe dos Passos and Grey, 14 Sept. 1945. Amer. Mus. Novitates, No. 1297: 8; figs. 21-22. "Type Material: The holotype male is from little Tesuque Canyon, near Sante Fe, New Mexico, 8000 feet, August 8, 1932 (A. B. Klots), and the allotype female is from Therma, New Mexico, August 12, 1932 (A. B. Klots). There is one paratype, a female, same locality as holotype, July 8, 1932 (A. B. Klots, C. F. dos Passos collection). The holotype and allotype are in the American Museum of Natural History. The paratype is in the collection of the senior author."

gregsoni, Argynnis rhodope Gunder, 31 Dec. 1932. Canadian Ent. 64(12): 281. "Holotype - ♀... Mt. Washington (6000 ft.). Forbidden Plateau, V[ancouver, I[sland]., B[ritish]. C[olumbia]., Can[ada]. July 7, 1931. Type in Author's coll."

hydaspe, Argynnis Boisduval, [1869, before 1 Nov.]<sup>8</sup>. Ann. Soc. Ent. Belgique 12: 60, no. 55. ♂ and ♀ described. "Du sud de la Californie où elle vole avec l'espèce suivante (= cybele = [leto])." No date nor series data given. Type locality "fixed" (dos Passos

and Grey, p. 21, 1947) as Yosemite Valley, Mariposa County, California.

minor, Argynnis hydaspe rhodope McDunnough. 25 July 1927. Canadian Ent. 59(7): 154-155. "Holotype - ♂, Mt. McLean, B[ritish]. C[olumbia].; June 12, 1926, (J. McDunnough). Allotype - ♀, same data. Paratypes - 2 ♂, 1 ♀, same data; 1 ♂ Lilloet, B. C., 4600 ft., July 14, 1916; 1 ♂ McGillivray Creek, Anderson Lake, B. C., Aug. 9, 1916; No. 2427 in the Canadian National Collection, Ottawa."

purpurascens, Argynnis monticola Henry Edwards. 1877. Proc. California Acad. Sci. 7(1): 170-171. "This beautiful variety was first taken by Mr. W. G. W. Harford, at the Dalles, Oregon, and subsequently by Mr. J. Behrens at Soda Springs, Siskiyou County, [California,] in which last locality I took about forty specimens. . . in the fall of 1875." No sex data given. Type locality given (dos Passos and Grey, p. 21, 1947) as Soda Springs, Siskiyou County, [California].

rhodope, Argynnis W. H. Edwards. Jan. 1874. Trans. American Ent. Soc. 5(?) sig. 2: 13-14. "From 3 ♂, 1 ♀, taken in British Columbia, in 1873, by G. R. Crotch, Esq." No date data given. Type locality "fixed" (dos Passos and Grey, p. 21, 1947) as Cariboo District, British Columbia.

sakuntala, Argynnis Skinner. 28 Feb. 1911. Entomological News 22 (3): 108. "Described from four males and one female. Habitat. - Ainsworth, B[ritish]. C[olumbia]., Aug. 13, 1903, Rev. G. H. Findley; Kalso, B. C., July 7, 1890, J. W. Cockle; Laggan, Alberta, T. E. Bean. Type Locality - Kalso, B. C. The specimens, excepting those from Laggan, were kindly submitted for study by Dr. C. Gordon Hewitt, Dominion Entomologist. The Alberta specimens and the type are in the collection of the Academy of Natural Science, of Philadelphia."

skinneri, Argynnis Holland. 1931 [before 31 Oct.]<sup>28</sup>. Butt. Book, rev. ed.; p. 95; plate 56, fig. 4. Proposes new name for Argynnis sakuntala Skinner which he considered too close to the name Argynnis sakontala Kollar, 1848. See sakuntala Skinner for data.

viridicornis, Argynnis hydaspe J. A. Comstock, 15 Nov. 1925. Bull. Sou. California Acad. Sci. 24(3): 63-64. "Types. Holotype ♂ Greenhorn Mountains, Calif[ornia]., July, 1923, W. H. Ireland. Allot type ♀, same locality, date, and collector. 3 paratypes, all taken at the same place, on the same date, by Mr. Ireland. Two of these will be deposited in the Barnes collection. The remainder are in the collection of the Southwest Museum."

#### 10. ARGYNNIS IDALIA (DRURY).

ashtaroth, Argynnis Fisher. Dec. 1859 - [before 30 Mar. 1860]<sup>6</sup>. Proc. Acad. Nat. Sci. Philadelphia [11](sign. 27): 352. A new name for his own Argynnis astarte, a preoccupied name. See his astarte for data.

astarte, Argynnis Fisher. Oct. 1858 - [before 31 Mar. 1859]<sup>6</sup>. Proc. Acad. Nat. Sci. Philadelphia [10] (13): 179-180; plate 2, 2 unnumb. figs. "... found. . . in New Jersey. . . in July. . . on Succasunna Plains, near Schooley's Mountain, in Morris Co[unty]." No sex given. A homonym of Argynnis astarte Doubleday in Doubleday and Hewitson, Genera Diur. Lepid.; v. 1; plate 23, fig. 5; [4 Oct. 1847]<sup>1</sup>.

dolli, *Argynnis idalia* Gunder. 31 Dec. 1927. Canadian Ent. 59(12): 286, no. 20; plate B, figs. 20, 20b. "Data: Holotype ♀... Richmond Hill, Long Island, N[ew]. Y[ork]... July 15, 1886. In Coll. Brooklyn Museum, Brooklyn, N. Y. "

idalia, *Nym[phalis]*. *Phal[eratus]*. Drury. [1773]<sup>3</sup>. Illust. Nat. Hist. I: [1] in Index. Described on page 25 and illustrated (figs. 1-3) on plate 13 but without any name. "I received them from New York, where they were taken on the 28th of June. " No series data given. Type locality "fixed" (dos Passos and Grey, p. 9, 1937) as New York City, New York County, New York.

infumata, *Argynnis idalia* Oberthür. July 1912. Études Lépid. Comparée 6: 315; pl. 104, fig. 969. 1 ♂ described. "Newark, N [ew]. J[ersey]., juillet 1909. "

pallida, *Argynnis idalia* Eisner. 1942. Zool. Mededeel. uitgegeven door het Rijksmuseum van Natuurlijke Hist. te Leiden 24(1-2): 124. "Patria: Decorah (Iowa); Oak Park (Ill [inois].). "Typus 1 ♂, Decorah, Iowa, 18. VII, 1912, ex Dr. A. Collier, im Rijksmuseum van Natuurlijke Histoire, Leiden. Paratypus 1 ♂, ebenda. "

#### 11. ARGYNNIS MORMONIA BOISDUVAL.

arge, *Argynnis* Strecker. 1878 [June - before 8 Nov.]<sup>27</sup>. Butt. and Moths N. Amer., Compl. Syn. Catal., p. 114, no. 210. California". No date, sex nor series data given. Type locality "fixed" (dos Passos and Grey, p. 23, 1947) as Monache Meadows, Tulare County, California.

artoni, *Argynnis* W. H. Edwards. [11 Mar. 1881]<sup>23</sup>. Trans. American Ent. Soc. 9(1) sign. 1: 1-2. ♂ and ♀ described. "... it flies in Colorado, but is rare. Mr. Mead met with three or four examples in 1872... I have received a single male from Big Horn, Montana; and recently have seen two females from Wells, Elko, Co[unty]., Nevada. These formed part of the collection of Mr. J. Elywyn Bates of South Albington, Massachusetts..." Type locality "fixed" (dos Passos and Grey, p. 23, 1947) as Wells, Elko County, Nevada.

astarte, *Argynnis* W. H. Edwards (not Doubleday, not Fisher). [5-12 Aug. 1862]<sup>7</sup>. Proc. Ent. Soc. Philadelphia 1(7): 221-222. ♂ and ♀ described. No series nor date data given. "Oregon; California". Misidentifies astarte of Doubleday. The action of dos Passos and Grey in designating a type and fixing the type locality establishes this name as a synonym of *Argynnis arge* Strecker, 1878. The name is a homonym of *Argynnis astarte* of both Doubleday and Fisher.

benjamini, *Argynnis mormonia* Gunder. 31 Dec. 1927. Canadian Ent. 59(12): 287, no. 22; plate B, figs. 22, 22a. "Data: Holotype ♂, ... Arangie, Idaho, no date. In Barnes Coll. "

bischoffii, *Argynnis* W. H. Edwards. Nov. 1870. Trans. American Ent. Soc. 3(?) sign. 25: 189-190. "From 1 ♂, 1 ♀... Taken in Aliaska, opposite Kodiak. . ." No date data given. Spelled bischoffi, by Holland, p. 102, Butt. Book, rev. ed., 1931.

brucei, *Argynnis eurynome* Gunder. 31 Dec. 1927. Canadian Ent. 59(12): 287, no. 23; plate B, figs. 23, 23a. "Data: Holotype ♀... Colorado... 1890. In Strecker Coll., Field Museum, Chicago... "

- clio, Argynnis W. H. Edwards, Oct. 1874, Trans. American Ent. Soc. 5(?) sign. 14: 106-107. "The first examples  $\sigma\sigma$  seen by me... were taken on the plains at the Teton Mountains... a  $\text{q}$  was sent me... taken... in the Rocky Mountains." No date data given. Type locality "fixed" (dos Passos and Grey, p. 23, 1947) as Jackson, Teton County, Wyoming.
- cunninghami, Argynnis erinna Owen, Sept. 1893, Entomological News 4(7): 246. "Hab. - Klammath County, Oregon." No sex nor date data given. One specimen is indicated.
- erinna, Argynnis eurynome W. H. Edwards, 18 Mar. 1883, Canadian Ent. 15(2): 33-34. "I have 12  $\sigma$ , 4  $\text{q}$  from Spokane Falls, W [ashington]. T[erritory]... and 1  $\sigma$  taken in Colorado... in 1871. Also I have a female nearer the Colorado type of eurynome... at Mt. Hood, Oregon". "Two females from Big Horn, Mont[ana]... , agree with this, but are large as the usual Colorado form." Type locality "fixed" (dos Passos and Grey, p. 23, 1947) as Spokane Falls, Spokane County, Washington. Spelled errinna by Wright, 1905, Butt. W. Coast U.S., p. 53, under no. 144.
- eris, Arg[ynnis]. eurynome Igel, 3 June 1922, Ent. Zeitschrift, Zentral-Organ des Internat. Vereins Frankfurt am Main 36(5): 20. "Jedesmal stammten die Tiere aus der Umgebung von Calgary (Alberta). Die Type in meiner Sammlung fällt auch gegen meine übrigen Stücke aus Montana eine etwas geringere Größe auf." No date nor sex data. A homonym of Argynnis eris Meigen [1828]<sup>21</sup>, Syst. Beschreib. Europ. Schmett. 1(?): 64-65, no. 19.
- eurynome, Argynnis W. H. Edwards, Mar. 1872, Trans. American Ent. Soc. 4(1-2) sig. 9: 66-67.  $\sigma$  and  $\text{q}$  described. "Mr. Mead found the species common throughout Colorado..." No date nor series data given. Type locality "fixed" (dos Passos and Grey, p. 23, 1947) as Fair Play, Park County, Colorado. Spelled eury-nomes by Edwards, 1874, in Hayden's Rept. for 1873, p. 542.
- fieldi, Speyeria mormonia eurynome dos Passos and Grey, 12 Dec. 1947, Amer. Mus. Novitates, No. 1370: 23-24. Propose new name for Argynnis eurynome clio gunderi Field, June 1936 which is a homonym of Argynnis gunderi J. A. Comstock, 15 Nov. 1925. See gunderi Field for specimen data.
- gunderi, Argynnis eurynome clio Field, June 1936, Jour. Ent. and Zool. (Pomona College) 28(2): 23. "Data: Holotype male... Broadwater Co[unty]., Montana, July 27, 1930". "Type in the author's collection." A homonym of Argynnis gunderi J. A. Comstock, 15 Nov. 1925.
- igeli, Speyeria mormonia eurynome dos Passos and Grey, 12 Dec. 1947, Amer. Mus. Novitates, No. 1370: 23-24. Propose new name for Arg. eurynome eris Igel, 3 June 1922 which is a homonym of Argynnis eris Meigen [1828]<sup>21</sup>. See eris Igel for details.
- jesmondensis, Argynnis bischoffi opis McDunnough, 11 Mar. 1940, Canadian Ent. 72(2): 25. "Holotype -  $\sigma$ , Jesmond, B[ritish]. C[olumbia]., July 24, 1937, (3500 ft.) (J. K. Jacob); No. 4925 in the Canadian National Collection, Ottawa. Allotype -  $\text{q}$ , same data, Aug. 3, 1937. Paratypes - 23  $\sigma$ , 11  $\text{q}$ , same locality and collector; various dates in 1937 and 1938 from July 14 - Aug. 3."

luski, Argynnis eurynome Barnes and McDunnough. 15 Apr. 1913.

Contrib. Nat. Hist. Lepid. N. America 2(3): 95-96, and 146; plate 1, figs. 1-4. "Habitat. White Mts., Arizona (Lusk). 7 ♂, 7 ♀. Types, Coll. Barnes." No date data given.

montivaga, Argynnis Behr. (not Behr, 1863). [1 - 7 Mar. 1865]7. In W. H. Edwards. Proc. Ent. Soc. Philadelphia 3(pp. 327-708): 435, nos. 4 and 5. "... always found in mountainous regions..." of California (from article title). No sex, series nor date data given. The action of dos Passos and Grey in designating a type and fixing the type locality establish this name as a synonym of Argynnis arge Strecker, 1878 and as a homonym of Argynnis montivaga Behr, 1863. Spelled montivago by Strecker, pages 113 and 114, Butt. and Moths N. Amer., Compl. Syn. Catal., 1878.

mormonia, Argynnis Boisduval, [1869, before 1 Nov.]8. Ann. Soc. Ent. Belgique 12: 58-59, no. 51. ♂ and ♀ described. "M. Lor-l'a trouvée assez abondamment en été sur les frontières de l'Oregon." Type locality "fixed" (dos Passos and Grey, p. 22, 1947) as Salt Lake City, Salt Lake County, Utah.

opis, Argynnis W. H. Edwards, Oct. 1874. Trans. American Ent. Soc. 5(?) sign. 14: 105-106. ♂ and ♀ described. "From several specimens taken at Bald Mountain, Cariboo, British Columbia, by the late G. R. Crotch, in 1873."

rainierensis (corrected), Argynnis eurynome washingtonia Gunder. 31 Dec. 1932. Canadian Ent. 64(12): 282. "Holotype - ♂... Paradise Valley, Mount Ra[i]nier, Pierce Co[unty]., Washington, Aug. 12, 1931. Allotype - ♀... same locality, Aug. 10, 1931. Paratypes - 3 ♂ and 3 ♀, Aug. 8 to 12, 1931, same place. One pair deposited in U. S. National Museum (Barnes Coll.), Washington, D. C., and one pair placed in Canadian National Coll. at Ottawa, Ont., Can. Types in Author's coll. Originally spelled ranierensis.

rubyensis, Argynnis eurynome artonis Gunder. 31 Dec. 1932. Canadian Ent. 64(12): 282-283. "Holotype - ♂... Franklin Slough, near Wright's Ranch, Ruby Valley, Elko Co[unty]., Nevada., July 9, 1929. Allotype - ♀... same place, July 12, 1929. Paratypes - 6 ♂, same locality and dates. 1 ♂ deposited in U. S. National Coll. (Barnes Coll.), Washington, D. C., and 1 ♂ deposited in Canadian National Coll., Ottawa, Can. Types in Author's coll."

washingtonia, Argynnis bischoffi Barnes and McDunnough. 15 Apr.

1913. Contrib. Nat. Hist. Lepid. N. America 2(3): 95 and 146; plate 1, figs. 5-8. "Habitat. Mt. Ra[i]nier, Wash[ington]. (7000 ft.) (July 24-30) (McDunnough). 7 ♂, 7 ♀. Types, Coll. Barnes."

## 12. ARGYNNIS NOKOMIS W. H. EDWARDS.

apacheana, Argynnis Skinner. 2 Feb. 1918. Entomological News 29(2): 67-68. Applies this new name to the four figures on the redrawn plate of nokomis (Argynnis IV) given by W. H. Edwards in his Butt. N. America, [Ser. 1]. "Mr. Edwards, having received five males and two females, of what I call apacheana, brought from Arizona..." No dates given by Edwards.

coerulescens, Argynnis nitocris Holland. Jan. 1900. Entomological News 11(1): 332-333. ♂ and ♀ described. "I... received a col-



lection of Lepidoptera made. . . in the state of Chihuahua, Mexico. The collection was taken at the head of the Rio Piedras Verdes, in Chihuahua, at an elevation of from 7, 100 to 7, 300 feet above sea level in the Sierra Madre region". "This form appears to be not uncommon in the month of September in the locality from which the specimens came. No series data given. Spelled caerulescens by McDunnough, 1938, Mem. Sou. Calif. Acad. Sci. 1: 14, no. 164a.

hermosa, Argynnis apacheana J. A. Comstock, 20 May 1925. Bull. Sou. California Acad. Sci. 24(1): 3-4. "Type: One male, Round Valley, Inyo County, California, July 30, 1922. In the collection of the author, Southwest Museum, Los Angeles."

nigrocaerulea, Argynnis nitocris Cockerell and Cockerell, Dec. 1900. Entomological News 11(10): 622. ♂ and ♀ described. "Hab. - Beulah, Sapello Cañon, New Mexico, middle of August, 1900". "Specimens are in Dr. Skinner's collection". No series data given.

nitocris, Argynnis W. H. Edwards, Jan. 1874. Trans. American Ent. Soc. 5(?) sign. 2: 15-16. "From one male taken at White Mountains, Arizona, by Lieut. Henshaw of the exploring Expedition under Lieutenant Wheeler, August, 1873."

nokomis, Argynnis W. H. Edwards, [1862, Apr. - 1 Aug.]<sup>6</sup>. Proc. Acad. Nat. Sci. Philadelphia [14] (5): 221-222. "Rocky Mountains of California". "The female I have not seen". No date nor series data given. Type locality "fixed" (dos Passos and Grey, p. 9, 1947) as Mount Sneffels, Ouray County, Colorado.

nokomis, Argynnis W. H. Edwards (not W. H. Edwards, 1862). [Jan. 1873]<sup>26</sup>. Butt. North America 1(Suppl.): [71-72] (revised text); pl. [23], figs. 1-4 (redrawn). "5 ♂, 2 ♀, brought from Arizona by the Exploring Expedition under Lieut. Wheeler, in 1871, but no further intimation of their locality." No date data given. This represents a different insect than what Edwards originally called nokomis and was subsequently named apacheana by Skinner.

rufescens, Argynnis nitocris nigracaerulea Cockerell, 15 July 1909. The Entomologist's Rec. and Jour. Variation 21(7-8): 186. "At Beulah, in the Sapello Cañon, [New Mexico,] my wife found a magnificent female (ab. rufescens, nov. . . ." No date data given.

valesinoidesalba (emendatio), Acidalia (Semnopsyche) nokomis Reuss. 10 Apr. 1926. Deutsche Ent. Zeitschrift (Berliner Ent. Zeit. and Deutsche Ent. Zeit. Weider.) Jahrg. 1926(1): 69. ♀ described. No date, locality nor series data given. "... Typen im Berliner Museum." Originally spelled valesinoides-alba.

wenona, Speyeria dos Passos and Grey, 14 Sept. 1945. Amer. Mus. Novitates. No. 1297: 1; figs. 1-2. "Type Material: The holotype male and allotype female were taken, in copula, in a sub-alpine meadow, 12, 000 feet, Cerro Potosi, Municipio de Galeana, Nuevo Leon, Mexico, July 18, 1938, by R. A. Schneider. They are in the American Museum of Natural History."

### 13. ARGYNNIS ZERENE BOISDUVAL.

behrensi, Argynnis W. H. Edwards, Sept. 1869. Trans. American Ent. Soc. 5(?) sign. 48: 370-371. "Taken at Mendocino, California. From 1 ♂, 1 ♀, in the Collection of James Behrens" . . . No date data given. Spelled behrensi by Holland, p. 93, Butt. Book, rev. ed., 1931.

bremnerii, *Argynnis* W. H. Edwards. Feb. 1872. Trans. American Ent. Soc. 4(1-2) sign. 8: 63-64. "From 2 ♂, 1 ♀, taken on San Juan Island... in 1871... and in the collection of Henry Edwards..." Spelled bremneri by Holland, p. 93, Butt. Book, rev. ed., 1931.

carolae, *Argynnis coronis* dos Passos and Grey. 8 Dec. 1942. Amer. Mus. Novitates No. 1214: 2-4; fig. 1 (left). "Type Material. - Holotype, male, Charleston Park, Clark County, Nevada July 8-9, 1928 (Eugene Schiffel), Gunder collection, in The American Museum of Natural History. Allotype, female, same data as holotype and in the same collection. Paratypes, twenty-four males and eight females: six, Charleston Park, Clark County, Nevada, 8000 feet, July 8-9, 1928; nine, Charleston Range, Clark County, Nevada, 10,000-11,000 feet, July 10-15, 1928; four, Charleston Range, Clark County, Nevada, 6000-8000 feet, July 15-28, 1928; eleven, Charleston Park, Lincoln County, Nevada, 8000 feet, July 9-24, 1928; and two, Charleston Park, Lincoln County, Nevada, 10,000 feet, July 13-15, 1928. Since the Charleston Mountains are almost entirely in Clark County, the last thirteen paratypes recorded are undoubtedly wrongly labeled "Lincoln Co." All are from the Gunder collection and, except for three male and two female paratypes in the junior author's collection, all are in The American Museum of Natural History."

conchyliatus, *Argynnis zerene* J. A. Comstock, 15 Nov. 1925. Bull. Sou. California Acad. Sci. 24(3): 63. "Types. ♂ holotype, Mt. Shasta, Calif[ornia]., July 19, 1921. ♀ allotype, Northern California, no date, collected by Cottle. Paratypes Nos. 1 to 4, ♂♂ Shasta Co[unty]., Calif., June 4th to July 10th. Nos. 5 to 8, Shasta Retreat, Siskiyou Co., Calif., June 16 to July 15. Coll. Barnes. Paratypes Nos. 9 to 12, ♀♀ Shasta and Humboldt Counties, Calif., July 5 to August 11, 1923. Nos. 13 to 16, Shasta Retreat, Siskiyou Co., Calif., July 1 to August 23. Coll. Barnes."

cynna, *Speyeria zerene* dos Passos and Grey. 14 Sept. 1945. Amer. Mus. Novitates, No. 1297: 4-5; figs. 11-12. "Type Material: This insect is described from a type series of 25 males and 9 females, all from Ruby Valley, Elko County, Nevada, as follows: holotype male, Humboldt National Forest, 1931-1932 (E. Schiffel, ex J. D. Gunder collection), and allotype female, Wright's Ranch, July 12-24, 1931 (ex J. D. Gunder collection). There are 32 paratypes as follows: 10 males and 6 female, July 12-26 (ex J. D. Gunder collection); 3 males and 1 female, July 12-24 (C. F. dos Passos collection); 12 males, various collectors and dates, July 12-July 16 (L. P. Grey collection). The holotype, allotype, and a series of paratypes are in the American Museum of Natural History. The other paratypes are in the collection of the authors."

garretti, *Argynnis* Gunder. 31 Dec. 1932. Canadian Ent. 64(12): 282. "Holotype - ♂... Cranbrook, B[ritish]. C[olumbia]., Can[ada]., July 29, 1929. Allotype - ♀... same locality, July 27, 1929. Paratypes - 2 ♂ and 2 ♀; one pair deposited in Canadian National Coll.,

- at Ottawa, Can., and one pair placed in the U. S. National Museum (Barnes Coll.), Washington, D. C. A series of topotypical examples in both sexes in Author's coll., including the types. "gloriosa, Speyeria zerene Moech, 1957. Geographic variability in Speyeria. Comments, records and description of a new subspecies. Paper presented to and sponsored by the Milkawkee Entomological Society; pp. 21-24; 19 figures and 1 map. "The type series was taken in the Illinois River Valley, Josephine County, southwestern Oregon, on the road leading west from Selma, along the river, from about 1,600 feet elevation down to about 1,100 feet. The catch was made on July 22, 1956. In addition to the holotype and allotype, both to be deposited in the American Museum of Natural History, New York, only seven females and eleven males are in sufficiently good condition to make paratypes. Aside from a pair to Grey, I shall try to keep the remaining paratypes together. The variation in this genus can be studied only in series; it would be a meaningless gesture to deposit individual examples here and there in separate museums. The present description makes known the fact of the occurrence of bremmerii-zerene intergradation in the southern Oregon Coast Range. . ."
- hippolyta, Argynnis W. H. Edwards, May 1879. Canadian Ent. 11(5): 81-82. "From 3 ♂ 1 ♀ received from Mr. G. M. Dodge, and taken in Oregon, but in what exact locality is not known. Another male was received from Mr. Edwards, from Northern California." No date data given. Type locality "fixed" (dos Passos and Grey, pp. 12-13, 1947) as Oceanside, Tillamook County, Oregon.
- malcombi, Argynnis J. A. Comstock, 5 May 1920. Southwest Science Bulletin; pp. 4-5; plate [1], figs. 5-6. "Described from 10 males and 4 females taken by Mr. Geo. Malcomb, as follows: 8 at Mammoth, California., Aug. 1 st to 18th, 1918 (The Type, Aug. 18th). 1 at Dead Man's Creek, Mono Co[unty]., July 27, 1919. 4 at Casa Diablo Lake, Mono Co., July 22, 1919. 1 at Silver Lake, Mono Co., July 22, 1919. Type, in author's collection, Southwest Museum. Cotypes in the George Malcomb Collection, Los Angeles."
- monticola, Argynnis Behr, Dec. 1863. Proc. California Acad. Nat. Sci. 3(1) sign. 6: 84, no. 4. "This species was found in Yosemite Valley and some other localities. . ." No sex, series nor date data given. Ibid., vol. 2, p. 175, Dec. 1862, the author says "This species [no. 8, unnamed] is found in several localities of the Sierra Nevada."
- myrtleae, Speyeria zerene dos Passos and Grey. 14 Sept. 1945. Amer. Mus. Novitates. No. 1297: 3-4; figs. 7-8. "Type Material: The holotype male is from San Mateo, California, July 27, 1919, and the allotype female is from the same locality, August 10, 1919. There are 5 paratypes as follows: 1 male and 4 females from the same locality, August 10-24. All. . . are in the American Museum of Natural History."
- pfoutsi, Argynnis Gunder. 2 Sept. 1933. Canadian Ent. 65(8): 171-172. "Holotype - ♂. . . Mt. Loafer, nr. Payson, Utah, July 16, 1932. Allotype - ♀. . . Payson Canyon, nr. Payson, Utah, July 16, 1932. Paratypes - 2 ♂ and 2 ♀ with similar dates and location; one pair placed in the U. S. National Museum (Barnes coll.),

- Washington, D. C., and one pair in the Canadian National Coll., Ottawa, Ont. Types in Author's coll., including a long series of topotypes in both sexes."
- picta, Argynnis halcyone McDunnough. 29 Feb. 1924. Canadian Ent. 56(2): 43. "Holotype - ♂, Aspen Grove, B[ritish]. C[olumbia]., July 14, (P. N. Vroom); no. 634 in the Canadian National Collection. Allotype - ♀, same data. Paratypes - 5 ♂'s, same locality, June 28, July 14."
- platina, Argynnis Skinner. 4 June 1897. Canadian Ent. 29(6): 154. ♂ and ♀ described. "Described from specimens taken at Ogden, Utah, between July 18th and 24th, and Beaver Canon, Idaho, at nearly same dates."
- shastaensis, Argynnis zerene J. A. Comstock, 15 Nov. 1925. Bull. Sou. California Acad. Sci. 24(3): 65-66. ♂ described. "Type. ♂ Mt. Shasta, Siskiyou Co[unty]. [California] July."
- sineargentatus, Argynnis montivaga malcombi Gunder. 31 Dec. 1927. Canadian Ent. 59(12): 286, no. 19; plate B, fig. 19. "Data: Holotype ♂... Mammoth, Mono Co[unty]., Calif[ornia]., Aug. 7, 1922. In Author's coll."
- sinope, Speyeria zerene dos Passos and Grey. 14 Sept. 1945. Amer. Mus. Novitates, No. 1297: 4; figs. 9-10. "Type Material: The holotype male and allotype female are from Rocky Mountains National Park, Colorado, 8000 feet, collected by Roy Weist (L. P. Grey collection) in the Estes Park area, July. There are 42 paratypes as follows: 12 males and 30 females with the same data. The holotype, allotype, and a series of paratypes are in the American Museum of Natural History. The other paratypes are in the collections of the authors."
- sordida, Argynnis [bremneri] W. G. Wright. 10 Oct. 1905. Butt. West Coast United States; p. 133, under no. 119. "I have taken in that locality" [Puget Sound, Wash[ington]., ? August, 1891]. No sex nor series data given.
- zerene, Argynnis Boisduval, 1852 [Aug.]<sup>24</sup>. Ann. Soc. Ent. France. 2nd. ser. 10(2): 303, no. 44. ♂ and ♀ described. "Cette jolie espèce, au moins aussi intéressante que la précédente, setrouve en juin au bord des bois, dans les montagnes peu élevées." No series data given. Type locality "fixed" (dos Passos and Grey, p. 12, 1947) as Yosemite Valley, Mariposa County, California.

## FOOTNOTES

1. Hemming, 1936-1943. Jour. Soc. Bibliog. Nat. Hist. 1: 335-464. Gives publication dates for the Genera Diur. Lepid.
2. No. 847: Dec. 1933 was received at the Boston Soc. Nat. Hist. Library (now Allen Hancock Foundation Library, Univ. Scu. Calif. ) on Dec. 19 1933.
3. Hemming, 1958. Official List Works Approv. Avail. Zool. Nomencl. 1st. Install. : pp. 7-10. Gives established dates for certain works of Cramer, Denis and Schiffermüller, Drury and Fabricius.
4. Maynard's work has no title page date; the introduction (p. iv) is dated Feb. 1886.
5. Sherborn, 1922. Index Animalium. 2nd. Ser. Vol. A-B: cxxxi. Gives publication dates for Zettersted's work.
6. Index Scient. Cont. Jour. and Proc. Acad. Nat. Sci. Phila. 1812-1912: pp. xii-xiii. Gives dates of receipt for certain early numbers of the Proceedings.
7. Brown, 31 Jan. 1964. Trans. Amer. Ent. Soc. 89: 305-308. Gives dates for Proc. Ent. Soc. Phila. vols. 1-6.
8. Trans. Ent. Soc. London. 1869: p. xix (in Proc. ). Notes receipt of Tomes 1-2 of the Ann. Soc. Ent. Belg. at Nov. 1, 1869 meeting. Boisduval's separate of the article may have been issued earlier.
9. Hemming, 1937. Hübner 1: 146-324. Gives dates for Samm. Europ. Schmiett.
10. Sherborn and Woodward, 1901. Ann. and Mag. Nat. Hist. Ser. 7. 7: 137-140. Gives dates for Esper's work.
11. Hemming, 1937. Hübner 1: 327-437. Gives dates for Samm. Exot. Schmiett.
12. Griffin, 1936. Trans. R. Ent. Soc. London 85: 243-279. Gives receipt dates for Seitz's work.
13. Pt. 3 title page signature date of 1878 is qualified by a transmittal letter date of 8 Aug. 1878 ( p. 1847). The report is mentioned as available in Bull. Brklyn. Ent. Soc. 2 (3: July 1879): p. 28.
14. Scudder, 1899. Psyche, Jour. Ent. 8: 153-154. Gives dates for several of Boisduval's works.
15. Dos Passos, "1958" [1959]. Lepid. News 12 (3-4): 119-120. Gives dates for Vol. 9 of the Encycl. Meth.
16. Title page is dated 1832. Cat. Libr. Mus. Brit. Vol. 2: p 686 (in Godart) says pp. 1-128 were issued in 1832.
17. Title page of Tome 1 also dated 1787 and its preface (p. vi) is dated 3 Feb. 1787.
18. Clark, 1951. Smithsonian Misc. Coll. 116(7) : 188. Gives date of Bull. 157 as 13 Feb. 1932.
19. The date on No. 26 is qualified by the first date of availability that I can find (see Bull. Brklyn Ent. Soc. Vol. 1 [no. Nov. 1878] : p. 59 ).
20. No. 6 dated Dec. 1877 is noted in Psyche, vol. 2, p. 156 as being received in Feb. 1878.
21. Dos Passos and Grey, 1947. Amer. Mus. Nov. (1237): p. 23. Give date as 1828.

22. I received vol 63 on 12 Mar. 1957, the printed date of issue ( in next volume) is probably earlier than this but I have not seen it.
23. Signs, 1-2 ( pp. 1-16) available at meeting of 11 Mar. 1881 ( see Trans. Amer. Ent. Soc. 9: p. ii).
24. Dos Passos, 1962. Jour. Lepid. Soc. 16 (1): 45-46. Gives date for Boisduval's 1852 article.
25. No. 5 dated Nov. 1877 is noted in Psyche, vol. 2, p. 156 as being received in Dec. 1877.
26. Hemming, 1931. Proc. Ent. Soc. London, Ser. A, 6: 42-45. Gives actual publication dates for the parts of Edward's Butt, N. Amer. , ser. 1.
27. Work title page date is qualified by date on page 251 and a notice of receipt given in Psyche, vol. 2 (nos. 49-52 ): 166, no. 996. Nos. 49-52 were issued 8 Nov. 1878.
28. Work title page date of 1931 is qualified by a review in Can. Ent. 63 (10) : 244-246. No. 10 was issued 31 Oct. 1931.

#### REFERENCES CITED

- DOS PASSOS, C. F. 1964. A Synonymic List of the Nearctic Rhopalocera. Lepid. Soc. Memoir (1): i-vi, 1-145.
- DOS PASSOS, C. F. and L. P. GREY. 1947. Systematic Catalogue of Speyeria (Lepidoptera, Nymphalidae) with Designations of Types and Fixations of Type Localities. *Amer. Mus. Novitates* (1370): 1-30.
- McHENRY, P. B. 1963. Generic or Subgeneric Names Closely Related to *Argynnis*. *Jaur. Res. Lepid.* 2(3): 229-239.